

PROMOTING SUSTAINABLE MANAGEMENT
IN
LOCAL RESOURCE MANAGEMENT ISSUES

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In Memory of Christina Smith

&

For Shane - the next generation.

CONTENTS

CHAPTER	PAGE
ABSTRACT	6
1. INTRODUCTION	7
1.1 An Emerging Thesis Topic	7
1.2 Thesis Aims	11
1.3 Thesis Framework	12
1.4 Thesis Outline	15
2. FROM SUSTAINABLE DEVELOPMENT TO SUSTAINABLE MANAGEMENT	17
2.1 Introduction	17
2.2 Sustainable Development and Sustainable Management - The Differences	17
2.3 Defining Sustainable Management - A Political Process	20
2.4 Sustainable Management Literature	29
2.5 From Sustainable Management To Sustainable Development	32
3. THESIS METHODOLOGY	34
3.1 Introduction	34
3.2 Analysing Sustainable Management in the Context of Public Planning	34
3.3 Establishing a Research Framework	35
3.4 Establishing Analytical Techniques and a Research Methodology	37
3.5 Methodological Problems	42
3.6 Conclusion	44
4. NORTHERN ACCESS ROAD - CHRISTCHURCH	45
4.1 Introduction	45
4.2 Roding and the RMA 1991	45
4.3 The Northern Road Access Proposal	46
4.4 The Groups Involved in the Issue	50
4.5 Summarising Sustainable Management	64
4.6 Factor Analysis	66
4.7 Northern Road Access Issue - Continuities and Changes	75
4.8 Conclusion	78
5. UNDERGROUND COAL MINING - MOUNT DAVY	80
5.1 Introduction	80
5.2 Mining and the RMA 1991	80
5.3 The Mount Davy Proposal	81
5.4 Key Groups Involved in the Mount Davy Proposal ...	83

5.5 Summarising Sustainable Management	95
5.6 Factor Analysis	97
5.7 Mount Davy Proposal - Continuities and Changes	105
5.8 Conclusion	106
 6. SUBDIVISION AND RESIDENTIAL DEVELOPMENT OF TRAVIS SWAMP AND KENNEDY'S BUSH SPUR	 108
6.1 Introduction	108
6.2 Subdivision and the RMA 1991	108
6.3 The Travis Swamp Proposal	109
6.4 Groups Involved in the Travis Swamp Issue	112
6.5 Summarising Sustainable Management	125
6.6 Factor Analysis	127
6.7 Travis Swamp Proposal - Continuities and Changes	132
6.8 The Kennedy's Bush Proposal	133
6.9 Summarising Sustainable Management and 'Green Belts'	140
6.10 Conclusion	142
 7. PROMOTING SUSTAINABLE MANAGEMENT AN EVALUATION	 144
7.1 Introduction	144
7.2 Putting Sustainable Management into the Local Government Public Planning Process	 144
7.3 Summarising Sustainable Management	155
7.4 Air Access Into Westland National Park	161
7.5 Continuities and Changes in Resource Management Issues	168
7.6 Concluding the Evaluation	172
 8. PROMOTING SUSTAINABLE MANAGEMENT - CONCLUSIONS	 174
8.1 Raising the Questions	174
8.2 Answering the Questions	175
8.3 Extending the Questions	179
8.4 Suggestions for Further Research	182
 REFERENCES	 183
PERSONAL COMMUNICANTS	198
ACKNOWLEDGEMENTS	200
APPENDIX	201

LIST OF FIGURES

FIGURE	PAGE
1.1 Location Map of Case Studies	14
1.2 Thesis Format	15
2.1 Concepts of Sustainable Development and Sustainable Management	18
3.1 The Local Government Public Planning Model	36
3.2 Group Classification Table	38
3.3 Factor Analysis Scheme	40
3.4 Interview Structure	42
4.1 Map of the Northern Arterial route	46
4.2 Factors Important to TNZ, the CCC and the CRC in the Northern Access Issue	54
4.3 The Effects of the Northern Arterial Designation on St Albans . .	62
4.4 Summarising Sustainable Management	65
5.1 Map of the Mount Davy Area	81
5.2 Factors Important to the West Coast Regional and Grey District Councils in Mining at Mount Davy	86
5.3 Summarising Sustainable Management	95
5.4 Rewanui Before and After the 1988 Landslip	101
6.1 Location Map of Travis Swamp, Bottle Lake Forest and Kennedy's Bush Spur Subdivision Sites	109
6.2 Factors Important to the CCC in Protecting Travis Swamp	114
6.3 Travis Swamp and Bottle Lake Sites	122
6.4 Summarising Sustainable Management	125
6.5 Kennedy's Bush Site	134
7.1 Putting Sustainable Management Into the Public Planning Process	145
7.2 Summarising Sustainable Management	156
7.3 Map of Westland National Park	162
7.4 Aircraft in the Franz Josef Glacier Nevees	163

ABSTRACT:

The Resource Management Act (RMA) 1991 is a much discussed and frequently criticised piece of legislation in New Zealand. The RMA 1991 is much discussed because it is part of a substantial reform of New Zealand's resource management law. It is much criticised because the overall purpose of the RMA 1991 is to promote the sustainable management of natural and physical resources (S.5(1)) but the meaning given to sustainable management in the RMA 1991 (S.5(2)) is ambiguous. These discussions and criticisms focus on the legislation. Little research on promoting sustainable management in the context of resource management practice has been undertaken so far. This research needs to be done because the context of resource management issues and the public planning process will influence how sustainable management is interpreted and applied in resource management practice.

This thesis is a comparative analysis of promoting sustainable management in four local government resource management issues: the northern access road issue, Christchurch; underground coal mining at Mount Davy, Rewanui; subdivision of Travis Swamp and Kennedy's Bush Spur, Christchurch; and air access into Westland National Park. The aims of the research are to establish: how sustainable management is being promoted in resource management practice; how important the RMA 1991 and promoting sustainable management is in determining resource management outcomes in the public planning process; and whether promoting sustainable management is resulting in a radical change in resource management practice.

The thesis makes three conclusions. Firstly, that while sustainable management is an ambiguous concept a 'working' interpretation is emerging in resource management practice based on managing adverse environmental effects. Secondly, that the RMA 1991 and promoting sustainable management is important to legitimise resource management proposals in terms of the law, but it is not the *raison d'être* for these proposals. Thirdly, that promoting sustainable management has resulted in changes in the way in which resource management proposals are assessed, but there are a lot of continuities in resource management practice despite resource management law reform.

1.1 AN EMERGING THESIS TOPIC:

Sustainability is an internationally recognised concept in resource management and a major part of recent resource management law reform in New Zealand. The question is whether all the rhetoric on sustainability is making any difference to resource management in practice and if so, how? Sustainable resource management is based on the recognition that all social and economic activity and ultimately human life is dependent upon an ecological resource base, and therefore is committed to maintaining the ecosystems and natural environment which forms that base. The Brundtland Report "Our Common Future" (World Commission on Environment and Development (WCED) 1987) politically popularised sustainable resource management at an international scale by introducing the concept of **sustainable development**. Sustainable development has become a much discussed and considered concept in both international aid and development projects for Less Developed Countries and in resource management in More Developed Countries, but New Zealand is believed to be the first country to attempt to legislate a concept of sustainability into resource management law (Ministry for the Environment 1988: p.9). The Environment Act 1986 S.1(c) provides that in managing natural and physical resources a 'full and balanced account' is taken of several concepts including the sustainability of natural and physical resources (S.1(c)(i)). The purpose of the Resource Management Act (RMA) 1991 is 'promoting the **sustainable management** of natural and physical resources' (S.5(1)). The meaning given to sustainable management in the RMA 1991 S.5(2) is:

"managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their economic, social, and cultural well-being and for their health and safety while -

- (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- (b) safeguarding the life support capacity of ecosystems; and
- (c) avoiding, remedying or mitigating any adverse effects of activities on the environment."

Sustainable management is a unique, indigenous concept which involves more than considering the sustainability of natural and physical resources as required in the Environment Act 1986, and which differs from but has been influenced by the Brundtland Report's (1987) concept of sustainable development. The RMA 1991 and the concept of sustainable management are products of a combination of two influences: changing international and New Zealand values on resource conservation and environmental protection; and the recent process of state sector restructuring which has changed public sector administration in New Zealand. The RMA 1991 has been described by government agencies such as the Ministry for the Environment (1991); environmental scientists, resource managers and planners (such as Grundy 1991, Banks 1992), and politicians (for example Palmer 1990, Upton 1991) alike as denoting a radical change in New Zealand's resource management philosophy and therefore practice in two ways. Firstly, the RMA 1991 integrates the management of fifteen natural and physical resources (including land and soil, air, water, minerals and structures fixed to the land, RMA 1991 S.2), in one Act with one purpose, to promote the sustainable management of natural and physical resources. These resources were previously managed under fifty seven different statutes with differing objectives and provisions (Ministry for the Environment 1991: p.1) Secondly, promoting sustainable management involves managing resource use, development and protection by assessing the effects of each proposal on ecosystems (S.5(2)(b)), the environment (S.5(2)(c)), and on the sustainability of the resource being used, developed or protected (S.5(2)(a)). This 'effects-based' approach to resource management is different from that under the repealed Town and Country Planning Act 1977 when natural and physical resources were managed by allowing specific activities to occur in certain areas or zones.

This thesis research came about because as a student of public policy and transport geography I am aware that building and widening roads is often a controversial resource management issue because of: the adverse effects of this resource use on the surrounding residential community and their 'living' environment; and because it is not an effective long-term solution to traffic congestion. Increasing the road capacity encourages motorists to use the road until it becomes congested again (Pas, 1986, p.390). I expected promoting

sustainable management of natural and physical resources under the RMA 1991 to result in a shift away from road building and widening as a principle form of traffic management in New Zealand because of the adverse environmental effects and short-term success of the activity. Therefore I was surprised and curious to find a roading project to widen Avonside Drive in Christchurch being proposed under the RMA 1991 in the same way as under the repealed Town and Country Planning Act 1977. When I asked a Christchurch City Council (CCC) traffic manager about this situation I was told that widening roads promoted the sustainability of the road network as a physical resource. I was referred to the draft statement of policies and objectives for the new City Plan, (the statutory planning document for promoting sustainable management in Christchurch), which described a sustainably managed road network as one which:

retains access and mobility in and around the City while protecting the investment in the road network and avoiding, remedying and mitigating any adverse effects caused by associated activities (Christchurch City Council, 1992, p.89).

This response raised a question: is sustainable management such an 'elastic' concept that any resource management practice can be justified as sustainable? A comment on Avonside Drive by a regional authority transport engineer that:

If it wasn't for the selfish interests of thirty-two residents...the City would have a lovely riverside park and an efficient expressway... and they're not even nice houses anyway (pers. comm.).

raised a second question. How could changes in the philosophy of resource management introduced in the RMA 1991 be implemented in resource management practice without changes in the knowledge, skills, and attitudes of the resource managers; and consequently, what is the relative importance of legislation compared with the skills and values of resource managers and other factors in determining the outcomes of resource management issues?

Having raised these questions I was unable to find any research or literature to address them. From reading literature on and talking to resource managers

about sustainable management it appears that four assumptions are made about the relationship between resource management legislation and practice. These assumptions have resulted in a general consensus that it is either too early or unnecessary to study the promotion of sustainable management in local government resource management issues. These assumptions are:

- that what sustainable management means in theory and legislation needs to be decided before looking at what it means in resource management practice;
- that it is the role of the Planning Tribunal to interpret the meaning of sustainable management and other ambiguous sections of the RMA 1991;
- that the RMA 1991 is still in a transitional phase and sustainable management will not be promoted in regional and local government until Regional Policy Statements and District Plans formulated under the Act become operative; and
- it is assumed that resource management issues will be resolved in accordance with the interpretation of sustainable management in the RMA 1991 and in statutory planning documents.

It is my belief that implementing sustainable management in local government resource management needs to be researched at this early stage of resource management law reform for the following reasons. Firstly, a universally agreed upon interpretation of the definition of sustainable management in the RMA 1991 S.5(2) may never arise. In the meantime the RMA 1991 is still law and as such sustainable management is being interpreted and promoted in regional and local government resource management irrespective and possibly quite independent of debates over different interpretations of S.5(2). Secondly, regional and territorial authorities **do** have a major role in interpreting ambiguous sections in the RMA 1991. Not all resource proposals are appealed to the Planning Tribunal and the Planning Tribunal can only give interpretations of sections of the Act relevant to the particular case being heard based on the evidence and arguments presented in the hearing (Tony Hearn QC: pers. comm.). These interpretations are not universal nor indisputable judgements (Ibid: pers. comm.). Thirdly, it could be several years before some Regional

Policy Statements and District Plans become fully operative as different provisions of the documents are contested and resolved in the local government planning process (Hearn 1994). In the meantime, whether in a 'transitional phase' or not, all resource management decisions still have to promote the sustainable management of natural and physical resources (RMA 1991: S.367). Finally, to assume that resource management outcomes will reflect resource management legislation and policies ignores a large body of literature and research on public policy-making which demonstrates that lots of other factors apart from resource management legislation determine how resource management issues are resolved. Therefore what the meaning of sustainable management in the RMA 1991 S.5(2) is interpreted to mean 'on paper' will not necessarily determine that this is the way in which resource management issues are resolved in practice. Tony Hearn QC, one of New Zealand's leading planning/resource management lawyers, believes that there are 'gaps' between the provisions of the RMA 1991 and what can and is happening in resource management practice (Hearn 1994). Hearn's observation reinforces the need to study promoting sustainable management in resource management practice at the same time as interpreting and criticising the definition of sustainable management in the RMA 1991 S.5(2).

1.2 THESIS AIMS:

This thesis aims to answer three questions which my study of the Avonside Drive roading proposal raised about promoting sustainable management in local government resource management practices. These three questions are:

- Firstly, is sustainable management such an 'elastic' concept that any resource management proposal can be argued to promote it?
- Secondly, where does the RMA 1991 and promoting sustainable management fit in the local government planning process and how important is it compared with other factors, including the skills and values of planners, in managing resource issues?
- Thirdly, given the answers to these first two questions, is the RMA 1991 and promoting the sustainable management of natural and physical resources going

to result in radical changes in resource management practice or will promoting sustainable management be 'business as usual' in local government resource management?

1.3 THESIS FRAMEWORK:

These questions shall be answered in two parts. Firstly, why sustainable management as it is described in the RMA 1991 S.5(2) is an ambiguous concept will be explained with respect to the influences on the Parliamentary law-making process within which this Act was formulated. Secondly, a comparative analysis of three local government resource issues being managed under the RMA 1991 will then be undertaken to establish how sustainable management is being promoted and its 'place' in resource management practices.

The RMA 1991 has introduced many changes to resource management but this thesis will focus on the objective 'to promote the sustainable management of natural and physical resources' because it is the purpose of the RMA 1991 and all other sections of the Act are subject to its purpose (as clarified in the Resource Management Amendment Act 1993, Harris, 1993, p.53). Deputy Secretary for the Environment at the time that the RMA 1991 was passed, Lindsay Gow wrote that:

"In essence S.5 should be seen as the single and authoritative starting and finishing point for all decisions under the Act. Careful thought therefore needs to be given to the intentions of sustainable management as defined in the Act and the ways in which it can be practically implemented" (Gow in Memon et al 1991, p.16).

Resource management issues in the local government public planning process were selected as case studies for three reasons. Firstly, promoting the sustainable management of natural and physical resources is the principle function of regional and territorial authorities under the RMA 1991 S.30 and S.31, respectively. Secondly, local government resource management issues tend to involve a variety of public sector regulatory authorities, business interests, and community and environmental groups. Past research experience

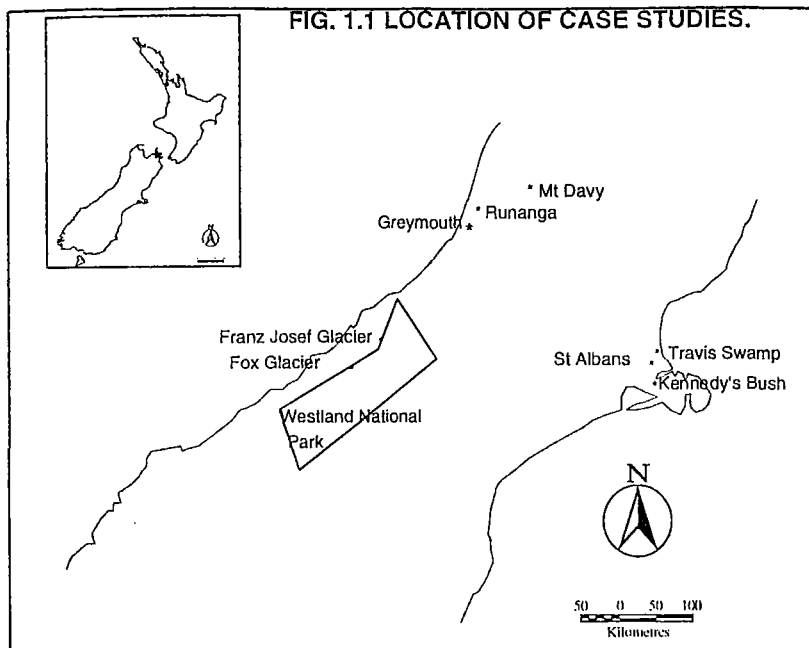
has indicated that private sector developers are more co-operative in research on a particular resource management proposal than when approached with general questions on environmental and/or resource management. Thirdly, local government resource management issues provide good indicators of continuities and changes in resource management over time because they can remain on the public planning agenda for years. Two of the case studies selected have been resource management issues for over twenty years.

Planning and policy-making are terms which are often used synonymously in literature and research. This thesis uses Collier's (1991, p.337) definition of planning as: "the process of selecting objectives and then determining the means by which those objectives will be achieved."

A similar definition of planning is used by the Christchurch City Council, (1992, p.1) which incorporates: formulating goals; establishing objectives; and implementing policies to indicate how objectives can be achieved. In this context policy-making is part of planning. The local government planning process refers to planning undertaken by regional and territorial authorities and by regional offices of central government bodies. The process involves public participation through submissions on and appeal of resource management proposals and decisions, and/or formulation of statutory planning documents.

Leichter (1979, pp 8-9) notes that comparative case studies are an underutilised tool of public policy research because public policy issues are complex, involving a variety of statutes and policies, and actors. Comparative case studies are used in this thesis because comparative research helps to illustrate similarities and differences in understandings of a concept such as sustainable management between people or over space or time. Similarities in understandings of sustainable management despite differences between case studies can be accepted as 'generalities' of sustainable management and contribute to inductive theory-building about or universal interpretations of sustainable management.

The three resource management issues selected are: provision for a northern



access road, Christchurch; underground coal mining at Mt Davy, Rewanui; and subdivision of Travis Swamp and Kennedy's Bush, Christchurch. The location of these case studies is mapped in Figure 1.1. Different resource issues were

selected because the RMA 1991 promotes the sustainable management of all these resources; and because the legislation is very recent so it is difficult to find several examples of one resource issue. The three particular case studies were selected for four reasons. Firstly, each case study involves a different planning requirement: the northern road access issue involves making provisions for transport management in the New City Plan; the Mount Davy case study requires resource consents; and the subdivision proposals, changes to an operative district scheme. The case studies can be compared to see if promoting sustainable management is applied to all resource management or only in formulating planning documents. Secondly, all three issues have long associations with adverse environmental effects - roading, mining and building on land with non residential values. They are also subject to changing ideas on traffic management, extraction of fossil fuels, and the importance of wetlands and areas of recreational value. Therefore to what degree promoting sustainable management reflects these changing values can be considered. Thirdly, the case studies were selected due to the amount of controversy surrounding them, to see whether different interpretations of promoting sustainable management contribute to controversy. Finally, all three proposals have been issues in local government resource management before passing of the RMA 1991 and so provide an opportunity to assess continuities and changes.

A fourth case study of air access into Westland National Park will also be analysed. This issue is managed by the Department of Conservation (DOC) under the National Parks Act 1980 and the Conservation Act 1987, not the RMA 1991, and so technically does not involve promoting sustainable management. The case study is used to illustrate two things: that some of the problems found in promoting sustainable management in the other resource issues are not particular to ambiguities in the concept of sustainable management but are a result of broader factors; and to further illustrate the relative importance of legislation compared with other factors in determining resource management outcomes. The case studies were selected in Christchurch and on the West Coast so that the socio-political, economic and physical environment within which the resource issues were being managed was familiar.

1.4 THESIS OUTLINE:

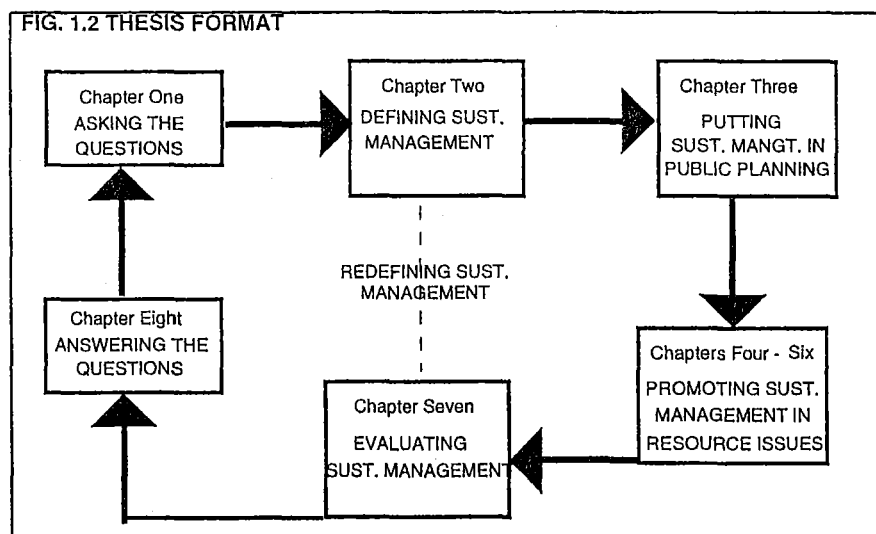


Figure 1.2 maps the outline of this thesis. Having posed the research questions in Chapter One, Chapter Two will illustrate the differences between sustainable development and sustainable management and describe the factors which have given rise to the unique, indigenous and somewhat ambiguous concept - sustainable management. Chapter Two will also review the main themes of literature on sustainable management to demonstrate why the questions which were raised in the Avonside Drive issue are not being discussed, and why this thesis addresses a 'gap' in the literature on this topic. Chapter Three will

explain how the local government planning process is understood to work in this thesis. From this understanding, the research framework, methodology and analytical techniques which have been used to research the case studies, will be explained. Chapters Four to Six will present the results of the first three case studies. Chapter Seven is a comparative evaluation of: the role of promoting sustainable management in the local government planning process; understandings of the concept of sustainable management; and causes of continuities and changes in the three case studies managed under the RMA 1991. The fourth case study will form a part of this evaluation. Chapter Eight will conclude the thesis by answering the three questions set out in this chapter.

CHAPTER TWO

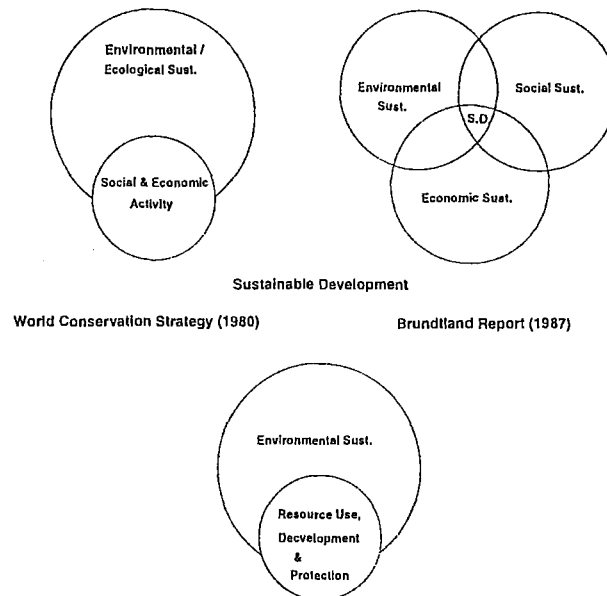
FROM SUSTAINABLE DEVELOPMENT TO SUSTAINABLE MANAGEMENT**2.1 INTRODUCTION:**

Sustainable management is an indigenous resource management concept which has resulted from several influences on New Zealand's Parliamentary law-making process including the Brundtland Report's (1987) version of sustainable development. This chapter will begin by explaining the differences between the two concepts. The definition of sustainable management in S.5(2) of the RMA 1991 S.5(2) will then be illustrated to be the product of two very different and sometimes conflicting sets of ideas and values: those of conservation and economic interests. The resulting ambiguities in the definition of sustainable management in the RMA 1991 S.5(2) will be highlighted by analysing the definition itself and reviewing the literature which has emerged on this topic. The literature review will also demonstrate the aforementioned 'gap' in the literature between the RMA 1991 and resource management practice which this thesis research attempts to redress.

2.2 SUSTAINABLE DEVELOPMENT AND SUSTAINABLE MANAGEMENT - THE DIFFERENCES:

Sustainable development, sustainable management and other concepts of sustainability recognize three basic principles: that all human economic and social activity is ultimately dependent on an ecological resource base; that in order to support economic and social activity that ecological base must retain its biodiversity and life support capacity; and that social and economic activities must enable the resource base to support human beings in the future. New Zealand's Ministry for the Environment (1988: p.98) notes that it is not the concept of sustainability which varies, but ideas about how sustainability can best be achieved. The two sources of the concept of sustainable development which have been most influential both internationally and in New Zealand are the World Conservation Strategy (International Union for the Conservation of Nature (IUCN) 1980) and the Brundtland Report (1987). Figure 2.1 adapts Grundy's (1993: p.19) model to illustrate the differences between these two versions of sustainable development and sustainable management.

FIG. 2.1 CONCEPTS OF SUSTAINABLE DEVELOPMENT AND SUSTAINABLE MANAGEMENT.



Both the World Conservation Strategy's (1980) and the Brundtland Report's (1987) concepts of sustainable development are anthropocentric - resources are being portrayed as being used in an ecologically sustainable manner for human benefit. Both concepts seek to redress environmental degradation resulting from overexploitation of natural resources in Less Developed Countries and pollution in More Developed Countries. The main difference is that in the World Conservation Strategy (1980) sustainable development is a **conservation** strategy to: "maintain and preserve the life support systems on which humans depend for survival and development" (World Conservation Strategy 1980: s.1 p.3). In the Brundtland Report (1987) sustainable development is a **development** strategy to: "ensure development meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987: p.8).

In the World Conservation Strategy (1980) sustainable development is achieved by ensuring that all social and economic activity occurs within the limits of ecological/environmental sustainability. Sustainable development in the Brundtland Report (1987) is depicted in Figure 2.1 as resulting from the

integration of ecological/environmental sustainability, economic sustainability - quality economic growth to alleviate absolute poverty and meet basic human needs, and social sustainability - ensuring that these needs are met in socially equitable and acceptable ways. No one form of sustainability is more important and 'trade offs' between the three forms of sustainability may be necessary (WCED 1987: p.41). Thus environmental sustainability can be compromised to achieve economic and/or social sustainability in the Brundtland Report's (1987) version of sustainable development but not in the World Conservation Strategy's (1980) version.

New Zealand is an active participant in international environmental debates, conferences and treaties which are based on the Brundtland Report's (1987) concept of sustainable development, but has enacted a concept of 'sustainable *management*' not 'sustainable *development*' in resource management law. Sustainable management is very similar to the version of sustainable development described in the World Conservation Strategy (1980). Both concepts are based on ensuring environmental/ecological sustainability. The main difference is that the World Conservation Strategy's (1980) version of sustainable development advocates more radical reforms of economic and social activity and institutions to ensure environmental sustainability than sustainable management does. Promoting sustainable management involves managing the adverse effects of using natural and physical resources on the environment. Economic and social activities themselves are not controlled. Sustainable management is therefore one part of the Brundtland Report's (1987) concept of sustainable development - ecological or environmental sustainability (Ministry for the Environment 1991: p.1). Promoting sustainable management must enable people and communities to provide for their well-being but this cannot be at the expense of environmental sustainability. There has been some debate about whether environmental sustainability can be traded against socio-economic needs in promoting sustainable management. The indication given by Minister for the Environment, Simon Upton, in the third reading and passing of the Resource Management Bill and the interpretation given by the Ministry for the Environment is that, sustainable management sets ecological parameters or 'bottom lines' (S.5(2) (a) to (c)) which no resource use can compromise (New Zealand Parliamentary Debates 4th July 1991: p.3019

and Ministry for the Environment 1991: pp1-3).

Some environmental researchers and resource managers have used the concepts of sustainable development and sustainable management interchangeably, particularly during initial enactment of the RMA 1991. Grundy (1993) argues that the concepts are synonymous because development and management mean the same thing. As Fisher (1991, p.58) notes, however, dictionary and legislative meanings of words are not always the same; and this chapter has just discussed two different versions of sustainable development - where the words are the same.

2.3 DEFINING SUSTAINABLE MANAGEMENT - A POLITICAL PROCESS:

Making provisions for sustainable resource management in the Environment Act 1986 and the RMA 1991 were part of an extensive process of resource management law reform in New Zealand. This process was influenced by three major factors: strengthening values on conservation and environmental protection both in New Zealand and internationally - of which the Brundtland Report (1987) is a part; state sector restructuring in New Zealand and the 'rationalisation' of resource management legislation and institutions; and established principles and practices of resource management within which changes to resource management law had to be made 'workable.' The concept of sustainability in the Environment Act 1986 S.1(c)(i) is not defined. The meaning given to sustainable management in the RMA 1991 S.5(2) is a product of these three influences on New Zealand's parliamentary law-making process.

Both drafting and review of the Resource Management Bill involved extensive consultation with a variety of resource management experts and interest groups including: business and labour sectors - including major companies and representative bodies such as Federated Farmers of New Zealand and the New Zealand Dairy Board; educational institutions; environmental and conservation groups; recreational organizations; and individual members of the public. Both conservation and development interests were well represented and very influential in the consultation process. The Resource Management Review Group noted that: "the sustainable management clause was much

amended as each of these interested bodies tried to change the 'balance' of the Bill in *their* interests" (Resource Management Review Group 1991: Appendix II p.5, emphasis added).

2.3.1 CONSERVATION INTERESTS:

Since the late 1970s two trends have been emerging in New Zealand which influenced the process of resource management law reform: growing concern for environmental protection and conservation particularly among urban New Zealanders; and increased public interest in both central and local government resource management issues and proposals. These values did not equate with New Zealand's resource management administration at the time. Large central government departments such as the New Zealand Forest Service and the Department of Lands and Survey had responsibility for both the development and protection of New Zealand's natural resources, with little accountability to the public in their administration of these resources. The Commission for the Environment had little statutory authority or real influence in matters of environmental protection beyond auditing Environmental Impact Reports which became compulsory for all major state sponsored resource management proposals after 1973 (Ministry for the Environment 1989: p.14, Commission for the Environment 1973).

Conservation groups wanted more explicit provision for conservation and more public accountability in state sector resource management. In the 1984 general election campaign the Labour Party recognised and appealed to this group of 'urban conservation' voters with policies to address environmental, and cultural issues (Ministry for the Environment 1989: p.5, Pawson 1992: p.188). Resource management law reform was initiated by the incoming Labour Government as part of a process a state sector restructuring.

International ideas and policies on conservation and resource management were important in directing resource management law reform in New Zealand , especially the concept of sustainable development. New Zealand's Draft Conservation Strategy (1981), a response to the World Conservation Strategy (1980), contained five resource management objectives. Three of these objectives have been incorporated into the definition of sustainable

management in the RMA 1991 S.5(2): protection of ecological processes and preservation of genetic diversity (in S.5(2)(b)); and sustainable use of resources - (in S.5(2)(a)). Other ideas from the World Conservation Strategy such as integrated management of resources have also been adopted in resource management law reform (World Conservation Strategy 1980: s.9).

The definition of sustainable management in the original Resource Management Bill was very similar to that of sustainable development in the Brundtland Report (1987). Sustainable management was defined as:

...managing the use, development and protection of natural and physical resources in a way or at a rate which enables people to meet their needs now without compromising the ability of future generations to meet their own needs....(Resource Management Review Group 1991: Appendix II)

and then went on to list seven factors which sustainable management included (refer to Appendix I). With a change of government in the 1990 General Election the Resource Management Bill was reviewed. The definition of sustainable management was considerably altered by the Resource Management Review Group because:

sustainable development is considered to embrace very broad concepts of social inequities and global redistribution of wealth which are not considered to be appropriate for this sort of resource management legislation (Ministry of the Environment 1991: p.1).

The definition of sustainable management was narrowed to that of establishing conditions for environmental protection and resource sustainability. Any control over social or economic activity beyond managing the environmental effects of such activity, was removed. In 1991 minerals, were excluded from the resource sustainability provisions because as non renewable resources, to manage them sustainably would involve regulatory authorities controlling the rate of their extraction and use, which are economic activities (Resource Management Review Group 1991: Appendix II p.5). These changes to the definition of sustainable management illustrate the influence of the second set of factors in developing the concept of sustainable management - state sector restructuring

and the influence of economic interests.

2.3.2 STATE SECTOR RESTRUCTURING AND THE INFLUENCE OF ECONOMIC INTERESTS:

Businesses and economic interests were also unhappy with the state of resource management administration in New Zealand by the early 1980s. At a central government level the Treasury were dissatisfied with the inefficiency of central government departments and their dual mandates of resource development and protection were seen to contribute to this inefficiency (Memon 1991: p.42). At a local government level the rules and regulations of the Town and Country Planning Act 1977 were being criticised by some developers as inefficient and unnecessarily inhibiting development (Storey, New Zealand Parliamentary Debates 28/8/90: p.3953, Collier 1991: p.340, Resource Management Review Group 1991: p.7, Hearn 1994).

These criticisms are important because the economic sector and the Treasury are very influential in any government. They were particularly so in New Zealand during the late 1980s because the process of state sector restructuring was initiated by the incoming Labour Government in 1984 as a response to the state's fiscal crisis (Boston 1991: p.2). State sector restructuring was based on neo-liberal economic and political ideas, centred on the belief that market mechanisms are more efficient than government intervention in or regulation of any activity. State sector restructuring involved the dismantling and corporatisation and/or privatisation of the state's commercial activities, and a revamp of the remaining public sector administrative functions along the lines of private sector management techniques (New Public Management (Boston 1991: p.3)).

Resource management law reform was an integral part of this process because state sector restructuring was necessary to break the monopoly which central government departments had on resource management to allow reform (Memon 1991: p.43). Resource management law reform was necessary to clarify the relationship of newly created State-Owned Enterprises to resource management legislation from which the crown was exempt, for example, the Town and Country Planning Act 1977. It was also necessary to provide for more accountability to the public and public participation in resource

management now that it is undertaken by the private sector (Wheeler 1987: pp 6-7).

The RMA 1991 and promoting sustainable management is a product of these political and administrative changes. The RMA 1991 'rationalised' resource management legislation in New Zealand. This legislation had evolved in a piecemeal fashion with separate statutes to manage specific resource issues such as high country soil erosion or urban sprawl as they arose, and numerous authorities to administer them. The RMA 1991 replaced fifty-nine statutes by integrating the management of fifteen natural and physical resources with one purpose, to promote sustainable management. (Gow 1991: p.18). Over four hundred regulatory authorities were replaced by (originally) fourteen newly created regional authorities; and over two hundred county and borough councils were amalgamated to form seventy-four territorial authorities (Ministry for the Environment 1991: p.8). Administration of the RMA 1991 has been decentralised. Resource management decisions have to be justified as necessary and illustrated to be the most cost-effective alternative under the RMA 1991 S.32.

Although based on the economic principles determining state sector restructuring, these changes were supported by conservation lobby groups. Resource conservation had been separated from development and provided for in a Department of Conservation (DOC) with an explicit conservation advocacy mandate; greater public accountability and participation in resource management had been provided for; and the concept of sustainability had been adopted into resource management law.

2.3.3 ESTABLISHED RESOURCE MANAGEMENT PRINCIPLES AND PRACTICES:

The RMA 1991 and promoting sustainable management was a product of changes in social values and state sector administration, but it has also been shaped by the established principles and practices of resource management which these changes have not affected. In this sense the definition of sustainable management in the RMA 1991 is not totally innovative. Public planning or resource management is based on the principle of the Law of Nuisance - that individual use of private property can only be controlled to

prevent an adverse effect or 'nuisance' on the general public (Max Barber, Regional Planner Canterbury Regional Council: pers. comm.). Consequently, resource management legislation tends to be reactive to resource uses and values rather than proactive in protecting environments (Buhrs and Bartlett 1993: p.136). Promoting sustainable management reinforces this principle and practice by managing the adverse effects of resource uses on the environment. The 'Matters of National Importance' and 'other matters' in S.6 and S.7 of the RMA 1991 are based on the provisions in the repealed Town and Country Planning Act 1977 S.4. They were included in the RMA 1991 by the Resource Management Review Group to provide some continuity in resource management based on existing case law (Resource Management Review Group 1991: pp9-10). Although the RMA 1991 is supposedly an integrated approach to resource management it is still based on managing natural and physical resources as individual media, not ecosystems or environments. It is managing individual resources such as land and water that resource managers have the skills and information to do. Similarly, promoting sustainable management is not an integrated approach to resource management because it continues to separate administration of economic, social and environmental sectors. This separation is inevitable given the different values of conservation and economic interests influencing Parliament. Conservationists do not often support using market mechanisms for protecting the environment, and neo-liberal economists do not like government intervention particularly in economic activity. Thus this separation is one example of the way in which sustainable management is a compromise between these two powerful political lobby groups, but as Buhrs and Bartlett note (1993: p.137) it is also a politically 'safe' resource management technique. By separating these sectors, the environmental (or social) 'costs' of economic policies are not readily apparent (even if the RMA 1991 makes identifying the environmental 'costs' of specific proposals clearer).

2.3.4 SUSTAINABLE MANAGEMENT - AN AMBIGUOUS COMPROMISE?

The meaning which has been given to sustainable management in the RMA 1991 is an attempt to accommodate the values of conservation and economic interests without giving a clear indication as to which set of ideas is more important. The most discussed example of this ambiguity is that promoting

sustainable management enables people and communities to provide for their well-being 'while' ensuring resource sustainability and environmental protection (Fisher's 'while' debate 1991: pp50-51). By using the word 'while' it is unclear which of these two sets of activities is more important in promoting sustainable management. The widely accepted interpretation from the Minister and Ministry for the Environment (1991: p.1) is that resource sustainability and environmental protection cannot be compromised by social and economic activities, but the definition does not explicitly say this.

In promoting sustainable management S.5(2) is also unclear as to what extent economic and social activity can be controlled by regulatory authorities. **Enabling** people and communities to provide for their well-being and managing the **effects** of resource use on the environment has been generally interpreted to mean that economic and social activity is controlled by market mechanisms. This is the interpretation which was given by the Minister for the Environment Simon Upton in his speech at the third reading of the Resource Management Bill. Upton stated that:

The only reason why there is a socio-economic clause in sustainable management is because the Resource Management Bill is about the effects of human agency on the environment. Without human activity there would be no need for legislation to protect the environment" (New Zealand Parliamentary Debates, 4th July 1991, p.3020).

In this context promoting sustainable management does not give regulatory authorities the functions of promoting and controlling economic development which regional authorities could assume under the Town and Country Planning Act 1977. If one interprets 'people and communities' to include regional and territorial authorities as part of the community, however, then this aspect of promoting sustainable management becomes ambiguous as well.

Promoting sustainable management is generally accepted to be about establishing ecological 'bottom lines' within which resource management has to take place. It is unclear how 'low' those bottom lines are, though, and therefore whether sustainable management is 'pro-conservation' or 'pro-development.' The provisions in S.5(2)(c) state that any adverse effect on the

environment must be avoided, remedied and mitigated but the Act does not establish at what point an environmental effect becomes adverse. Whether Parliament intended sustainable management to promote conservation or development is unclear in the Parliamentary Debates. Simon Upton stated in his speech at the third reading of the Bill that "whether sustainable management is 'pro-development' or 'pro-conservation' will depend on the particular case at hand...and is up to the courts to decide" (New Zealand Parliamentary Debates 4th July 1991: p.3019).

The ultimate example of ambiguity in the meaning given to sustainable management in the RMA 1991 S.5(2) is that promoting sustainable management can be easily accommodated in both a neo-liberal economic and a conservation approach to resource management. The Ministry for the Environment (1988: pp5-8) provides an excellent example of this ambiguity in promoting sustainable resource management in general. Sustainable resource management can be interpreted from a 'conservation' approach (called an 'ecocentric' approach in the example) whereby sustainability is a resource management **objective**. Sustainability is achieved by maintaining a supply of all resources for future generations; and by managing adverse effects to avoid irreversible changes to ecosystems (Ibid: pp5-8). Using a neo-liberal economic approach (called a 'technocentric' approach in the example) sustainable management is a resource management **method** used to maximise social welfare by using resources at their highest market value - which includes protection of rare and valuable resources. Sustainability is achieved by maintaining a general productive capacity for future generations (Ibid: pp 5-8). The Business Roundtable has adopted this interpretation of sustainable management (New Zealand Business Roundtable 1990: p.12). Promoting sustainable management as it is defined in the RMA 1991 S.5(2) could be accommodated in either of these two perspectives. Although in reality a combination of community values and established resource management practices will result in an approach to promoting sustainable management which is much less ideologically 'pure' than this example, the example does illustrate what Adrienne Shields describes as "the chameleon nature of sustainable management which means different things to business and environmental scientists" (Shields 1992: p.48).

2.3.5 IS THE AMBIGUITY INEVITABLE?

The definition of sustainable management in the RMA 1991 S.5(2) has been illustrated to be ambiguous because it is not clear whether sustainable management favours 'conservation' or 'development' of natural and physical resources. The Minister's declaration that it is "... up to the courts to decide" is considered by some legal practitioners to be an abdication of Parliament's law-making responsibilities to the courts (Harris 1993: p.72, Hearn: pers. comm.). Undoubtedly sustainable management has been defined to accommodate both conservation and development values. Labour MP Peter Simpson described sustainable management as: "...neutral...development and conservation are both necessary and important in a sustainable society" (New Zealand Parliamentary Debates 28/8/90: p.4113). As an Opposition MP before the 1990 general election, Simon Upton also said that the Resource Management Bill must have "standards to ensure that sustainable management is reasonably acceptable to diverse groups in the community (Ibid: p.4113). In this sense ambiguity in the definition is intentional. The question is whether such ambiguity is *inevitable* given the nature of the Parliamentary law-making process, and therefore whether it is appropriate that these ambiguities are clarified in the judicial system.

Ambiguity in the definition of sustainable management was inevitable because MPs are the political representatives of the community and responsible to voters. Therefore satisfying both conservation and development interests were important to both political parties. Changes in the definition of sustainable management in the National Government's review of the Resource Management Bill may, however, reflect the Labour Governments stronger commitment to conservation and environmental issues at the time, and the National Government's to market led economic growth. Labour Minister for the Environment Geoff Palmer described sustainable management as: "a reorientation in the way in which the environment is administered and protected" (New Zealand Parliamentary debates 28/8/90: p.3961). National MPs seemed more concerned about the effects of the Resource Management Bill on development and economic growth (Denis Marshall, Ruth Richardson, Rob Storey New Zealand Parliamentary Debates 28/8/90: pp3961-3963). MP Rob Storey was particularly concerned that the Resource Management Bill

result in a "swifter and cheaper" planning process (Ibid: p.3953). An ambiguous definition of sustainable management may have been the only politically feasible way of getting the Resource Management Bill passed.

Hambleton (1983, p.407) concludes that ambiguity in legislation and policies is caused by the nature of party politics. The process of defining sustainable management fits the reasons given by Hambleton for such ambiguity. Firstly, many causes of environmental degradation are poorly understood which makes it difficult to set clear policies. Secondly, central government has little control over sustainable management which will be implemented largely at a regional and local government level. Thirdly, and most significantly, sustainable management involves very different ideas of conservationists and developers so politicians leave room for 'negotiation' in policies. It must also be remembered that the majority of New Zealanders are neither 'hardlined' conservationists or developers, and a resource management concept which leaves room for compromises in environmental protection is acceptable to many voters.

Is it the appropriate role of the Planning Tribunal to clarify these ambiguities? In the sense that resource management issues are resolved through a local government public planning process which provides for full public consultation and right of appeal, then this is acceptable to determine whether conservation or development of resources is more important to the local community. There are two problems with leaving such decisions to the local government planning process. Firstly, developers tend to be advantaged over community interest groups in the local government planning process, because they have more resources available to them (Lindblom 1980: p.42), and have the advantage of the initiative in the resource consent process. Secondly, the Planning Tribunal must make its decision based on applying the intentions of Parliament in passing the legislation to a particular issue (Tony Hearn: pers. comm.). This cannot be done if these intentions are not clear.

2.4 SUSTAINABLE MANAGEMENT LITERATURE:

A review of the substantial body of literature on sustainable management illustrates how ambiguity in the definition in the RMA 1991 S.5(2) is being

interpreted and debated. It also demonstrates why research into implementing sustainable management in resource management practice needs to be undertaken at this early stage of resource management law reform. Conclusions about the 'workability' of the definition of sustainable management and problems in implementing it are being made without establishing if and how these problems are being solved in practice. Most of the literature concludes that how sustainable management is promoted will depend on the attitude of resource managers and planners, but does not investigate what these attitudes are.

Two types of literature on sustainable management are emerging: descriptive literature and critiques. Much of the descriptive literature on interpreting sustainable management as a concept has been produced by the Ministry for the Environment. Regional and local authority planners/resource managers have also produced literature (mostly conference papers) on interpreting sustainable management as a concept. Most of this literature tends to be quite 'idealistic' - analysing sustainable management as a concept and not applying it to resource management practices except for some hypothetical case studies. Even papers from planners have tended to focus on how sustainable management *should* be promoted rather than how it *can* be promoted. Because the Ministry for the Environment is a government agency and because regional and territorial authorities are responsible for promoting sustainable management the literature from these two sources makes or at least does not challenge two assumptions about sustainable management. Firstly, that sustainable management is a much more effective and efficient approach to resource management and environmental protection than repealed legislation. Secondly, that although implementing sustainable management will involve some changes to resource management practices sustainable management can be promoted by existing regulatory authorities and the public planning process.

Most of the literature criticising sustainable management has come from lawyers, resource managers (outside regional and territorial authorities), environmental scientists and economists. This literature tends to criticise the definition of sustainable management for not indicating how to promote the

concept. In this chapter we have noted some of the legal debates and critiques of sustainable management. For example, Fisher's (1991) 'while' debate in which he argues that whether sustainable management is interpreted as balancing environmental protection and socio-economic development or whether it is an environmentally dominated concept depends upon whether the word 'while' in the definition of sustainable management (S.5(2)) is used as a subordinate or a co-ordinate conjunction. Similarly, there is Milligan's (1992) critique of Fisher's argument and focus on interpretation of the word 'resources' to give an indication of the intended meaning of sustainable management; and Harris' (1993) critique of the ambiguous intentions of Parliament in drafting the definition of sustainable management in the RMA 1991.

A second body of literature has emerged from the lack of direction on how to promote sustainable management which focuses on the worth of using market mechanisms to ensure environmental protection. This debate is between adherents to neo-liberal economic theories such as the New Zealand Business Roundtable (1990) and the Tasman Institute (1991); and criticisms from environmental scientists and resource managers. These criticisms vary from works such as Rees (1985, p.261) and Cocklin (1989, p.269) discussing problems in establishing price values for pollution; to criticisms of the free market philosophy which does not adequately represent social values of resource sustainability and environmental protection, for example, Cocklin (1989a), Marshall (1988) and Baines et al (1988). This literature is limited in its applicability to promoting sustainable management under the RMA 1991 because it does not consider that there are still regulatory authorities, statutory planning documents, and resource consent conditions to ensure environmental protection under the RMA 1991, and that economic instruments can be used as *part* of promoting sustainable management.

Literature has also emerged which discusses problems in promoting sustainable management within existing legal and resource management systems because of the ambiguous nature of the concept. This literature recognises that promoting sustainable management will be shaped by the way in which it is interpreted in local government resource management, but still assumes that resource management legislation determines resource management outcomes and therefore that these problems need to be

addressed in the legislation. For example, Caldwell (1988, pp3-4) argues that sustainable management can be interpreted as an overriding policy objective, as one of several equally weighted policy objectives, or as a resource management method, which will result in different resource management outcomes (1992, p.8). Similarly, Brash (1992, p.4) questions how environmental 'bottom lines' can be established and maintained for managing resources; and Cocklin (1989a, p.344) how to determine the spatial and temporal extent of the adverse environmental effects to be managed. The literature does not consider that established resource management practices, community values, and the skills and information available to resource managers may determine these things without being stipulated in the legislation.

Literature on the RMA 1991 has described sustainable management as a product of the processes of state sector restructuring and resource management law reform, but not its implementation as a product of the local government planning process. Some interpretations have concluded that the amount of change in resource management resulting from promoting sustainable management will be largely determined by the attitudes of resource managers, for example, McChesney (1991: p.34) and Harris (1993: p.72); but little research has been undertaken to investigate how sustainable management is being interpreted and applied to resource management issues in practice. Chapter Three will further demonstrate the need for such research to be undertaken by illustrating the role of the public planning process in interpreting resource management policies and shaping outcomes.

2.5 FROM SUSTAINABLE DEVELOPMENT TO SUSTAINABLE MANAGEMENT:

This chapter has discussed the difference between sustainable development and sustainable management. Sustainable management has been illustrated to be a product of three influences on the Parliamentary law-making process: strengthening conservation values in New Zealand and internationally and the popularisation of concepts of sustainable resource management; state sector restructuring and the strong influence of neo-liberal economic values in New Zealand; and established resource management principles and practices. The

definition of sustainable management in the RMA 1991 S.5(2) was illustrated to be ambiguous, particularly in whether it is a 'pro-development' or a 'pro-conservation' approach to resource management. The question was raised as to whether this ambiguity was a deliberate abdication of Parliament's law-making responsibilities to the judicial system, or whether it is the inevitable result of democratic parliamentary policy-making. One further question must also be considered in criticising ambiguity in the meaning given to sustainable management in the RMA 1991 S.5(2),. Without ambiguity in the definition of sustainable management would the Resource Management Bill have ever been passed? The extensive review of the Bill with the change of government in 1990 and comments in the parliamentary debates accompanying readings of the Bill suggest that some National Party MPs found the original concept to be politically unacceptable. The task of this thesis is now to establish whether that ambiguity is also necessary to make promoting sustainable management in resource management practice politically feasible, or whether it makes it technically difficult.

CHAPTER THREE ***THESIS METHODOLOGY***

3.1 INTRODUCTION:

How sustainable management is being promoted in resource management practice needs to be analysed as part of interpreting and criticising the meaning of sustainable management in the RMA 1991 S.5(2) for two reasons. Firstly, other factors in the public planning process apart from legislation determine resource management outcomes. Secondly, these other factors may mean that some of the ambiguous parts of the meaning of sustainable management in the Act are not so ambiguous when put in the context of specific resource management issues. Chapter Three will outline how the public planning process is believed to influence resource management outcomes and therefore why it is important to study promoting sustainable management in this context. The research framework, methodology and analytical techniques used for researching the case studies in this thesis will then be outlined.

3.2 ANALYSING SUSTAINABLE MANAGEMENT IN THE CONTEXT OF PUBLIC PLANNING:

Analysing sustainable management in terms of how it is being promoted in resource management practice was identified in Chapter Two as a 'gap' in the literature and research on sustainable management. Not considering the influence of the public planning process on resource management outcomes is quite common in research on many resource management topics. In such literature the public planning process is assumed to follow a normative planning model whereby resource management outcomes are determined by resource management legislation or policy. Research into how public planning processes operate indicates that this normative planning model does not occur in reality. Therefore resource management concepts such as promoting sustainable management need to be studied in the context of the public planning process. Pirie (1981, pp378-379) noted that legislated objectives are distorted in implementation due to the interaction of a variety of factors including: the perspectives of the parties involved; the resources available to implement the objectives; the skills and values of policy-makers; and political

and social priorities. Similarly, Alexander (1986, p.4) argues for the importance of linking theoretical concepts and action in planning because the action or implementation and its outcomes provide the framework for evaluating the success of the concept; and May (1991) concluded that legislation has to be politically feasible to be passed and implemented. It was suggested in Chapter Two that ambiguity in the meaning of sustainable management in the RMA 1991 S.5(2) may have been necessary to make the passage of the Resource Management Bill politically feasible. The same diverse conservation and economic values influencing central government politicians will also influence local government politicians (councillors) making decisions on local resource issues. Therefore ambiguity in the meaning of sustainable management may be necessary to make implementing sustainable management politically feasible. As such, the meaning of sustainable management should not be criticised without considering the implementation phase of resource management.

3.3 ESTABLISHING A RESEARCH FRAMEWORK:

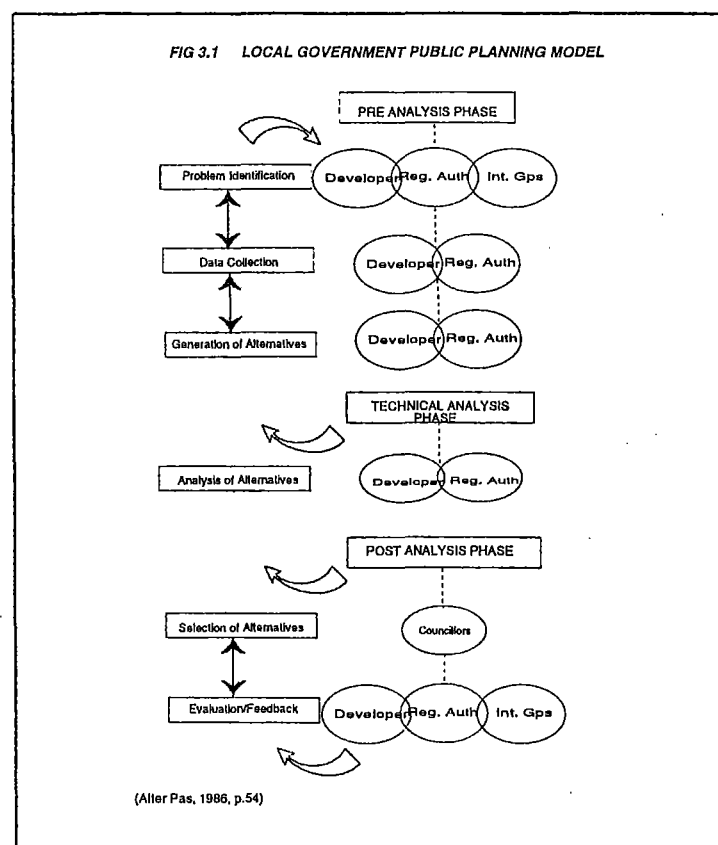
Public planning literature has contributed to this research in two ways: ideas about how the planning process operates have been used to establish a research framework; and specific case studies were used to establish a research method and analytical techniques.

Two approaches to or understandings of how planning/policy-making processes work can be distinguished. Firstly, the aforementioned normative or prescriptive planning model which depicts planning as a series of ordered, rational decision-making points. Normative planning models assume that a clearly defined problem exists; that comparable goals, objectives, and policies to deal with the problem can be identified; and that a complete range of alternative actions is known and assessable. The planner, as an independent and objective professional, is assumed to be able to select an outcome which addresses the problem in the best interests of the 'general' public (Mitchell, 1979, p.205).

Secondly, descriptive planning models have emerged as a critique of normative planning models. Descriptive planning models accept that planning has a **structure** based on an ordered series of actions and decision-making points

but emphasises that each action and decision is influenced by a myriad of variables both internal and external to the planning **process**. Internal variables include: the cognitive capacity and skills of planners to interpret resource management issues and develop resolutions - Simon's (1957, 1959) 'bounded rationality' concept; the influence of interest groups particularly 'business' interests on politicians making resource management decisions (Lindblom, 1989, p.24); and the resources available and priority given to resolving the issue. External variables may include: the degree of social concern over the issue; the nature of the problem itself and its ability to be resolved; and whether legislation or policies exist to address the issue. Lindblom's and Braybrooke's (1963) and Lindblom's (1968) concept of 'disjointed incrementalism' or 'muddling through' describes public planning as undertaking small incremental changes to **manage** resource management issues rather than major changes to **resolve** issues. 'Muddling through' occurs because in reality most resource problems are not clearly defined and the range of alternative options is limited and tends to be close to the status quo (Lindblom, 1968, pp297-298).

A descriptive planning model is assumed to operate in the local government public planning



process in this thesis and is modelled in Figure 3.1. The ***Local Government Public Planning Model*** has a normative planning structure (after Pas, 1986, p.54) but each stage of decision-making is recognised to be influenced by different groups involved in particular resource management issues. Due to this influence each stage of the decision-making process is interlinked and the whole planning process occurs within an environment or context. This environment influences the actions and interaction of the groups involved in the planning process and the possible ways in which the resource issue can be managed (after Sabatier, 1986, p.41).

A third approach used to understanding the planning/policy-making process is metapolicy analysis. Metapolicy analysis studies the planning process in the context of the values and institutions of the society within which it is operating. Metapolicy analysis is used to explain fundamental changes in planning or policy-making practices as a result of changes in fundamental social systems or values. For example, Hambleton (1983) considers fiscal crises and Sabatier (1986) changes in 'deep core' social values to explain drastic shifts in planning. Buhrs and Bartlett (1993) use metapolicy analysis to explain state sector restructuring and resource management law reform in New Zealand. This thesis has extended Buhrs' and Bartlett's (1993) analysis to explain the process of defining sustainable management in Chapter Two as a product of changes in conservation values and of state sector restructuring; coupled with continuities in resource management principles and practices. Metapolicy analysis will also be used in Chapter Eight to evaluate the way in which sustainable management is being understood and applied in the case studies as a product of the context within which the resource issues are occurring; and of continuities and changes in resource uses, social values and resource management.

3.4 ESTABLISHING ANALYTICAL TECHNIQUES AND A RESEARCH METHOD:

Research on implementing sustainable management in the local government public planning process will be based on a comparative analysis of the four case studies identified in Chapter One. Comparative analysis of the case studies will take place at two levels. Firstly, within each case study the

understanding of and factors which are important to key groups involved in the research issue, and their respective awareness and understandings of the concept of sustainable management will be compared. Secondly, similarities and differences in awareness and understanding of promoting sustainable management will be compared between case studies; and with the definition of sustainable management in the RMA 1991 S.5(2).

The key groups involved in each case study have been identified as: developers; regulatory authorities; political representatives (councillors); community interest groups; environmental organisations and Tangata Whenua. The classification basis for each group is outlined in Figure 3.2. One group which has been excluded from analysis is the 'general public.' The views of the 'general public' are supposed to be represented by regulatory authorities through the public planning process; and research indicates that the public who are aware of and interested in a resource management issue form the community and environmental interest groups which influence the public planning process (O'Riordan, 1971, p.109).

FIG. 3.2 GROUP CLASSIFICATION TABLE:

GROUP	DEFINITION
REGULATORY AUTHORITIES	Regional and territorial authorities and regional branches of central government bodies responsible for resource management.
POLITICAL REPRESENTATIVES	Locally elected councillors
DEVELOPERS	Any party proposing to use or develop a resource which needs consent from a regulatory authority.
COMMUNITY INTEREST GROUPS	Public groups interested in the issue, including residential and recreational groups and groups formed specifically over the resource issue.
ENVIRONMENTAL GROUPS	Environmental organisations committed to broad environmental policies and use specific resource management issues to gain public and political support for their wider causes.
TANGATA WHENUA	Iwi or hapu who have manu whenua in an area. Tangata Whenua must be consulted in decisions under the RMA 1991, but are a key group only in the Mt Davy case study.

The groups involved in a resource management issue are important in determining its outcome. O'Riordan (1971: p.109) notes that the definition of a resource is particular to certain groups at specific points in time, so different groups consider resource management issues from different perspectives.

Planners/resource managers and councillors have always been important groups influencing New Zealand's local government public planning process. Community interest groups and environmental organisations have become more influential since the late 1970s. This influence reflects an international trend which has resulted from planning projects which have failed to meet the needs of or consider the wishes of local communities (Hall 1982: p.67). The trend has reportedly resulted in a shift from 'paternalistic planning' where planners make decisions for the 'public good' to 'participatory planning' where planners consult with the local community (Lindblom 1980: p.24).

Mandatory consultation with the local community and Tangata Whenua (RMA 1991 First Schedule S.3 and Fourth Schedule S.1) and the right of any party to make a submission on a resource management proposal (RMA 1991 S.96) means that community interest groups have much greater potential to participate in the public planning process under the RMA 1991 than under the repealed Town and Country Planning Act 1977. Under the Town and Country Planning Act 1977 only persons affected by or representing a relevant aspect of the public interest could make a submission on a resource management proposal (S.2(3)(c) and (d)).

Private sector developers have always had their resource management proposals subjected to the public planning process in New Zealand, but as discussed in Chapter Two, much resource management before state sector restructuring was undertaken by the state. The state (crown) was exempt from many public planning provisions, for example, the Town and Country Planning Act 1977 and the Coal Mines Acts 1925 and 1979. All persons and organisations are subject to the public planning provisions of the RMA 1991 excluding the crown in matters of defence and in administration of crown land with protected status (RMA 1991 S.4).

Public participation in resource management issues is important in determining their outcomes. May (1991: pp192-195) concludes that the nature of the planning process is determined by the involvement of public interest groups. When resource management issues involve 'publics' solutions have to be 'politically' as well as 'technically' feasible, which results in a different (and usually more restrictive) set of resource management options.

The factors which are important to groups in the case studies will be analysed using a tripartite factor analysis scheme illustrated in Figure 3.3. This scheme is a modification of Leichter's (1979) 'factor analysis' which was used to comparatively analyse the variables influencing health policies in four nation states. Promoting sustainable management can be either a structure-culture or an external factor influencing the way in which resource issues are managed. Sustainable management is a structure-culture factor if it is the basis upon which a resource management issue is resolved. Sustainable management is an external factor if it is recognised as resource management law which a

FIG.3.3 FACTOR ANALYSIS SCHEME:

LEICHTER'S FACTORS	
STRUCTURE FACTORS	social, economic and political systems of society which are constant over time
CULTURE FACTORS	community values and beliefs
SITUATIONAL FACTORS	special circumstances, e.g. war
ENVIRONMENTAL FACTORS	external to but influence policy, e.g. international aid conditions
THESIS FACTOR ANALYSIS	
STRUCTURE/CULTURE FACTORS	characteristics, values and functions of the group
SITE FACTORS	important features of the resource management site or proposal
EXTERNAL FACTORS	factors external to but influencing the proposal including characteristics of the planning process and of the local community

resource proposal has to abide by but is not an explicit reason for the resource management proposal.

Two established techniques for studying implementing policies in the public planning process have been used in all four case studies. Top Down and Bottom Up Approaches form one method for studying the way in which legislation and policies are implemented in resource management outcomes. The Top Down Approach assumes a normative planning model and traces policy implementation from legislation through the decision-making stages in the planning process to resource management outcomes. The Bottom Up Approach analyses the actions of and influences on resource managers implementing policies and thus distorting policy outcomes from the legislation or policy. Both approaches are recognised to have weaknesses because each

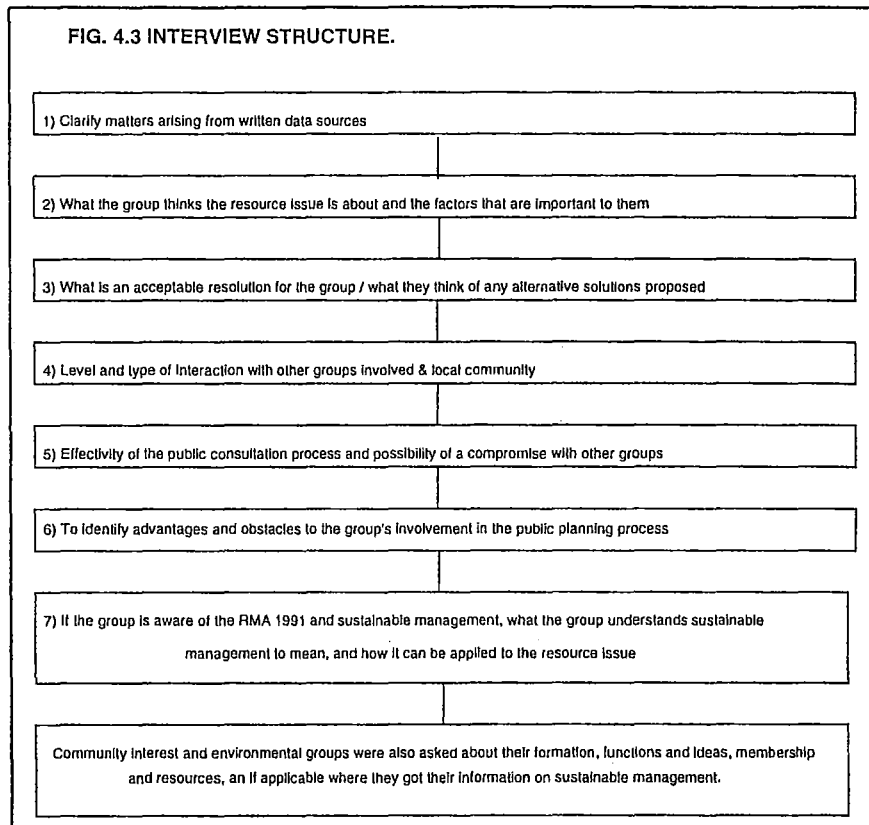
approach only focuses on one part of the planning process. Consequently, Mitchell (1979: p.295), Hambleton (1983: p.406) and Sabatier (1986: p.37) recommend synthesising both approaches in researching policy implementation, which has been done in this thesis.

Each case study was researched using a consistent set of data sources in a Top Down Approach: relevant legislation, statutory planning documents and policies of regulatory authorities, developers and community and environmental interest groups (where applicable); the resource management proposal and environmental impact assessment(s); submissions; and 'evidence' from hearings. Interviews with representatives from each group were undertaken and the group's actions and comments in local newspapers were observed in a Bottom Up Approach.

Elmore's (1979-1980) Forward and Backward Mapping techniques are methods for gathering data on resource management issues. Forward Mapping involves using formal documents such as legislation, statutory planning documents, and resource management proposals to get information. Backward Mapping techniques start with specific resource management issues happening 'on the ground' and 'back -track' through the planning process to collect data.

Backward Mapping was used to collect data on the case studies. Resource management issues were identified and a consistent 'mapping' technique was followed, starting with the regulatory authority managing the issue and using available information from that authority to identify the developer, other regulatory authorities, and interest groups involved. A standard format was used in all interviews. Questions were designed to establish each group's understanding of the resource management issue, the concept of sustainable development; and the reasons for these understandings. Figure 3.4 illustrates the basic interview structure.

A modification of Burton's (1971, p.3) environmental attitude matrix will be used to summarise similarities and differences in each group's understanding of sustainable management in each case study.



3.5 METHODOLOGICAL PROBLEMS:

The main problems with this research have stemmed from using case studies at different stages in the public planning process. Consistent research methods were used but exactly the same data sources were not available for all case studies. Satisfactory verbal and written information was available to complete each study, however. It would have been interesting to follow each resource management issue to a conclusion in order to see how sustainable management is finally interpreted and agreed upon by regulatory authorities and interest groups, or by the Planning Tribunal, but is not essential to this research for three reasons. Firstly, each resource management issue had been in the planning process long enough to get an indication of how each group considered the issue in relation to promoting sustainable management. Secondly, regulatory authorities usually make recommendations to councillors for resolving resource issues using objectives and policies from district and regional plans (or schemes). These objectives and policies are much more specific than the general concept of sustainable management. Similarly Planning Tribunal decisions on resource issues are usually in relation to a point of law in the RMA 1991 which is much more specific than its overall purpose.

Thirdly, not all resource management decisions will be appealed to the Planning Tribunal, even if there is disagreement with that decision, and Planning Tribunal decisions are not necessarily the end of an issue as shall be illustrated in the northern access road case study.

The transitional phase of local government resource management was also a problem because current planning documents were formulated under the repealed Town and Country Planning Act 1977. Planners often commented that sustainable management will be more effectively promoted when Regional Policy Statements and District Plans (formed under the RMA 1991) become operative. Draft copies of most of these documents were available, however, which illustrated how regulatory authorities were wanting to promote sustainable management in resource issues. As noted in Chapter One, resource management decisions must promote sustainable management whether these documents are operative or not (RMA 1991 S.367).

Interviewing has some well documented research problems such as bias in the asking and answering of and interpreting answers to questions. The questions were designed to try and reduce some of these problems. The same information was asked in two different ways so that inconsistencies in the answers could be noted. Questions were asked which required respondents to explain their understandings of and experiences with the resource management issue and the public planning process, rather than responding to my suggestions. The use of both written and verbal evidence helped to validate information from both sources.

The research topic made data collection, particularly interviewing difficult. Sustainable management is not a simple concept for even the most 'seasoned' professional to comprehend so questions had to be 'pitched' at a level suitable to the respondent's expected and indicated awareness of sustainable management and the RMA 1991. This problem was managed by studying specific resource management issues rather than discussing sustainable management per se, but even among planners in regulatory authorities there was marked variation in awareness and comprehension of the concept. Only a few of those staff interviewed considered promoting sustainable management

to have the potential to be much more innovative than managing the adverse effects of activities on the environment; or understood promoting sustainable management to be ambiguous at a conceptual level (as opposed to being ambiguous because it was not clearly written in the RMA 1991 S.5(2)).

3.6 CONCLUSION:

This chapter has illustrated how promoting sustainable management needs to be researched in the context of managing resource issues in the local government planning process because this process tends to influence resource management outcomes. The approach that this thesis has taken to understanding how the public policy process works was then described; and the research framework, methodology and analytical techniques used to research implementing sustainable management in the case studies was explained. The next step is to present the results of the case studies.

NORTHERN ACCESS ROAD - CHRISTCHURCH

4.1 INTRODUCTION:

Building roads has had a long association with adverse environmental effects, particularly on the surrounding residential community which experiences property devaluation, social dislocation, and an unpleasant living environment from losing their homes to or being left residing beside a motorway. This chapter will explore how building a northern access road through the residential area of St Albans in Christchurch is understood to promote the sustainable management of natural and physical resources under the RMA 1991 S.5. The relationship of roading to the RMA 1991 will be described. The northern road issue will then be outlined, why it is a resource management issue in the local government planning process and its value as a case study in this thesis explained, and the key groups involved in the issue identified. Each group's understanding of the issue and its relationship with the concept of sustainable management will then be discussed and a factor analysis undertaken to explain similarities and differences in those understandings between groups. Northern road access in Christchurch has been a resource management issue since designations were placed on St Albans houses to build a motorway in 1966 and so provides an opportunity to assess continuities and changes in the issue with passing of the RMA 1991.

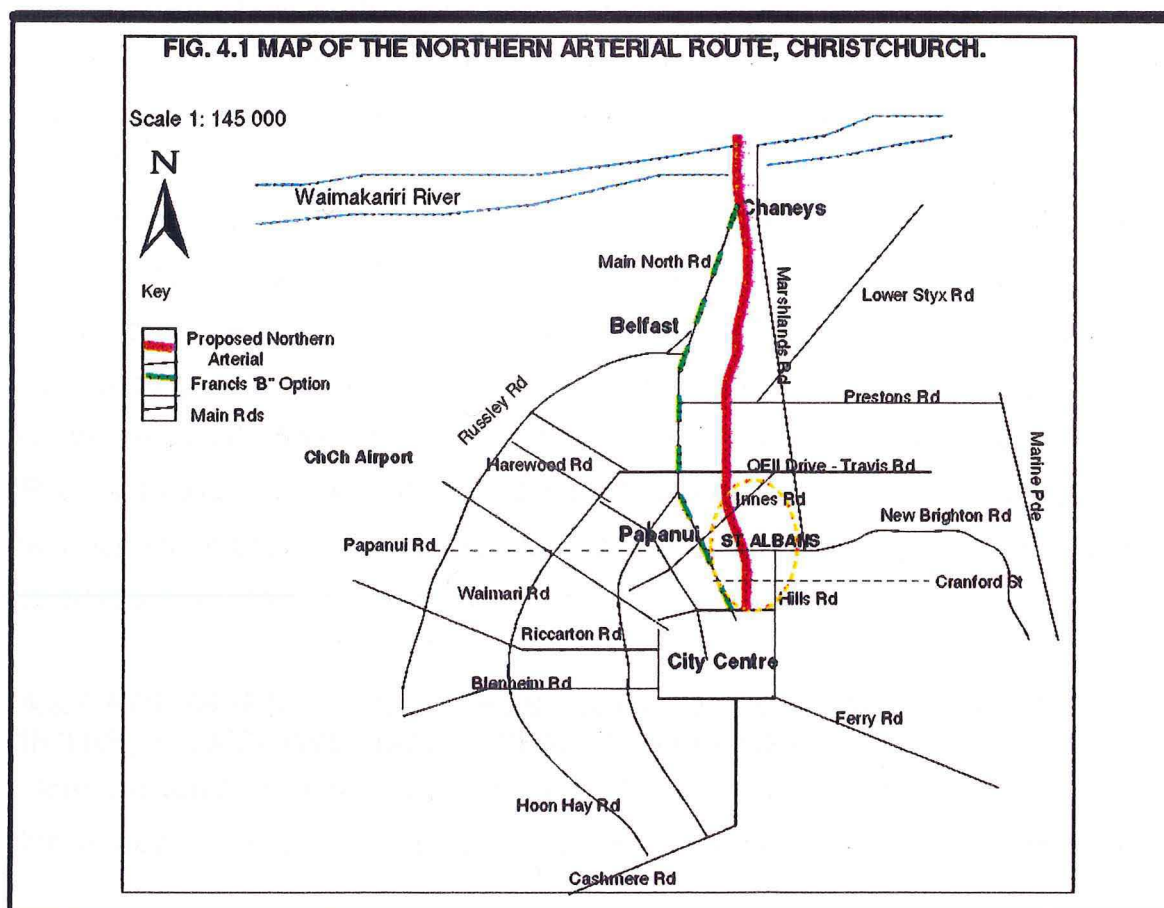
4.2 ROADING AND THE RMA 1991:

Constructing and maintaining roads is the function of territorial authorities, responsible for local roads and Transit New Zealand (TNZ), responsible for state highways and financially subsidising local roading projects. Both local roads and state highways are covered by two pieces of legislation. Firstly, roads are physical resources and building roads is a landuse in terms of the RMA 1991. Therefore designating land for and constructing roads is managed under the RMA 1991 and must be either provided for in a district plan (major works) or by a landuse consent (minor works). The roading proposal must meet the objectives of the City Plan which aim to promote the sustainable

management of natural and physical resources; and must be a more efficient traffic management technique (in terms of economic, social and environmental costs and benefits) than the existing situation (the 'do nothing' scenario) or any alternative option (RMA 1991 S.32). These requirements for roading proposals under the RMA 1991 are very different from those under the repealed Town and Country Planning Act 1977 and the Public Works Act 1981. Under these Acts designating land to build roads was a 'right' of landuse. Secondly, major road works such as building a northern access road must be included in the District Land Transport Plan and demonstrated to be consistent with the objectives of the Regional Land Transport Strategy under the Transit New Zealand Act 1989. To qualify for TNZ's financial subsidies a roading proposal must also meet TNZ's cost-benefit criteria.

4.3 THE NORTHERN ROAD ACCESS PROPOSAL:

Christchurch's northern road access issue is based on a combination of: increased traffic congestion along existing northern roads into the inner city - Cranford Street and Papanui Road; and a long-standing plan to relieve that



congestion and to provide alternative, efficient access between northern suburbs and North Canterbury settlements and the inner city by building a new road through the residential area of St Albans. Figure 4.1 maps the study area. Traffic congestion along these roads was predicted in the Master Transport Plan 1959 and a six lane northern motorway from Chaney's traversing the city and linking with a southern motorway at Waltham was proposed to relieve congestion. In 1966 the National Roads Board (NRB) served designations on three hundred and sixty six properties to build the northern motorway. In 1979 the Master Transportation Plan was reviewed and the northern motorway down-scaled to a four lane northern arterial road from Chaney's into the inner city. Since 1979 the proposal has kept emerging on the local government planning agenda as both the City Planning Scheme and transport planning have been reviewed. The latest episode in the northern access issue emerged because the NRB was disbanded as part of state sector restructuring in 1989 and TNZ, which has taken over the NRB's functions (TNZ Act 1989 S.13), sought permission from the Ministry of Transport to uplift that part of the northern arterial designation through St Albans. TNZ believes, despite strong contrary arguments from the Christchurch City Council (CCC) that a new road through St Albans is not cost-effective and does not promote sustainable management under the RMA 1991. TNZ offered to transfer the designation to the CCC to build a northern access road without TNZ's financial assistance. There was some debate over the legality of transferring part of a designation under S.179 of the RMA 1991 and on legal advice the Christchurch City councillors voted not to do so on 25th May 1994. Although the designations on St Albans' properties have now been uplifted the resource management issue is not resolved. The congestion problems on Cranford Street and Papanui Road still exist and the CCC is now considering a variety of traffic management techniques for the area including placing its own designation through St Albans to build a new road.

4.3.1 NORTHERN ROAD ACCESS - A RESOURCE MANAGEMENT ISSUE IN THE LOCAL GOVERNMENT PLANNING PROCESS:

Northern road access into Christchurch is a resource management issue in three ways. Firstly, a resource use conflict is occurring on the existing road

network between commuters wanting fast access into the inner city and local motorists trying to get access to residential properties and commercial services along the streets. This conflict in use of the road network is causing stress to motorists and to residents and is therefore a resource management issue among community groups. Secondly, traffic congestion is resulting in a decreased level of service on main roads and encouraging motorists to use residential streets as 'short-cuts.' Both traffic situations are inconsistent with the transport goals and policies of the CCC. Therefore a resource management issue exists at a 'technical' level too. Thirdly, the proposal to manage this issue by building an alternative access road through St Albans means changing the land use and character of the current residential environment. This change creates both a 'technical' and a 'political' resource management issue between the CCC and St Albans residents, and between residents and motorists affected by current traffic congestion and St Albans residents affected by the northern arterial designation.

Three factors have added to the need and demand for a solution to this resource management issue from all groups affected, and have divided both the community and their political representatives, the Christchurch City councillors. These three factors are: the length of time that the designation has been in place and consequent planning blight; predictions of continued and increased traffic on the existing road network; and an alternative traffic management option of widening Cranford Street. The northern motorway proposal was incorporated in the local government public planning process when the Master Transportation Plan (1959) was adopted into the Canterbury Regional Planning Scheme in 1971 and therefore the Christchurch City Scheme in 1972. Under the Town and Country Planning Act 1977 the proposal was subject to public submissions when the City Scheme was reviewed in 1982 and transport options assessed in 1985. The proposal has been taken to the Planning Tribunal *twice* by the St Albans Residents Association (SARA) as a result of these reviews. In both appeals the Planning Tribunal found in favour of the defendants (the CCC and the Ministry of Works) and in 1988 upheld the need for a 'northern arterial' reportedly concluding that:

Our expectation is that the first stage of the Northern Arterial will proceed within the next five years and again we would be surprised and disturbed if it does not (Planning Tribunal 1988: p.2).

Under the RMA 1991 the public may apply for a change to the City Plan at any time and not only during a review period as under the Town and Country Planning Act 1977 (S.59). Whichever option is selected for traffic congestion in the area will be subject to a publically notified change to the operative City Plan. The public also have indirect participation in all local government planning decisions through their elected Councillors and Community Boards.

4.3.2 WHY STUDY THE NORTHERN ACCESS ISSUE?

The northern access issue is a particularly valuable case study for this thesis for several reasons. The facts that the proposal has been seriously considered for thirty-five years, that it was twice upheld by the Planning Tribunal, and that it remains on the local government planning agenda despite resolute opposition from the St Albans community and changing approaches to traffic management provide, in themselves, intriguing examples of the characteristics of local government planning. Particularly important for this thesis, though, are three characteristics of the northern access resource management issue. Firstly, as with the proposal to widen Avonside Drive which prompted this thesis research, building a northern access road is being promoted as a traffic management option under the RMA 1991. Therefore the same question which gave rise to this thesis research must again be asked: how does building a road promote sustainable management when it has adverse effects on the local community and encourages use of private motor vehicles which is an unsustainable form of transport? Secondly, while the CCC argues that building a northern access road promotes sustainable management, TNZ disagrees. This disagreement is a useful example of the 'elasticity' of the concept of sustainable management and the different ways in it can be applied to resource management issues. Thirdly, the northern arterial designation was reportedly a very influential planning issue in resource management law reform. Labour MP's Geoffrey Palmer (Christchurch Central) and David Caygill (St Albans) supposedly lobbied for specific sections in the RMA 1991 to ensure that a long-term planning designation could never affect a community like St Albans again (Robin Odams Regional Manager TNZ, Councillor Garry Moore: pers. comm.).

These specific clauses are S.184 which restricts the length of any designation to five years unless otherwise provided for in a district plan; and the definition of environment (S.2) to include people and communities and therefore promoting sustainable management to consider the adverse effects on people and communities in S.5(2)(c) (Ibid: pers. comm.). If these intentions of the RMA 1991 are correct then the CCC's claims that promoting sustainable management supports long-term strategic planning and the use of long-term designations to retain planning options for future generations (CCC 1994: p.2), is a perfect example of the way in which planners and other groups involved in the public planning process can shape and interpret resource management legislation and objectives.

4.4 THE GROUPS INVOLVED IN THE ISSUE:

Because provision for roads is a state function carried out by local authorities and TNZ, the CCC and TNZ are both developers and regulatory authorities in the northern access case study. Cranford Street forms part of the State Highway One route, and the Northern Arterial road was going to replace that function. Therefore congestion on Cranford Street is a concern for TNZ as well as the CCC. The Canterbury Regional Council (CRC) is also a regulatory authority because although planning consent and finance is not required from the CRC to build the northern access road, any major roading proposal must be consistent with the transport policies for the region in the Regional Policy Statement (RMA 1991) and the objectives of the Regional Land Transport Strategy (TNZ Act 1989); and because the provisions of the Canterbury Regional Planning Scheme which support a northern arterial are still operative at present.

It is councillors who make the final decision in any resource management issue. Christchurch City Councillors made the decision not to take over the northern arterial designation from TNZ and will decide which traffic management option will be used to relieve congestion in the area. Because northern road access is such a controversial resource management issue both between the St Albans residents and the CCC, and between residents themselves, Councillors as political representatives of the community are divided in their views on the northern access issue. Therefore Christchurch City Councillors form a

distinctive key group in this resource management issue.

There is substantial support for and objection to building a northern access road among a variety of individuals and interest groups. The community interest group which has been most involved in the issue is the owners of designated properties in the area - the SARA. As traffic congestion in the area has increased and the opportunity for the designation to be uplifted arose, other local residential groups have become involved in the issue. Two of these groups will be studied to illustrate the concerns of residents whose houses are not designated but who are affected by traffic congestion and the northern arterial designation. The two groups selected are the Shirley-Papanui Community Board and the Merivale Precinct Society. No environmental interest groups have become involved in the northern access road issue. Two possible reasons for this lack of involvement are that: building the road is seen to be a fait accompli; and/or that building the road threatens a residential not a natural environment.

4.4.1 THE DEVELOPERS AND REGULATORY AUTHORITIES:

TRANSIT NEW ZEALAND:

TNZ owns eighty per cent of the property designated for the northern arterial, a \$17.2 million investment (The Press 25/5/94), but refused to continue with building the northern arterial or to negotiate any part financing of the road with the CCC. TNZ has argued in correspondence with the CCC that building a northern access road is not promoting sustainable management under the RMA 1991. TNZ requested permission from the Minister of Transport to uplift the NRB's northern arterial designation in July 1990, however, over a year before the RMA 1991 was passed (CCC Traffic and Roading Manager 1994: p.2). The grounds for this request were that TNZ could not finance building a northern access road within their ten year planning framework (Ibid: p.1, Robin Odams, Regional Manager TNZ: pers. comm.). This action indicates that TNZ's decision not to support building a northern access road was mostly an economic decision and that promoting sustainable management in the RMA 1991 supported rather than initiated that decision.

The factors which influenced TNZ's decision that building a northern access

road is not a cost-effective solution to traffic congestion are: TNZ's assessment of the existing traffic situation on Cranford Street and Papanui Road; and the way in which TNZ finances roads. TNZ agree that there is traffic congestion on existing roads in the area but do not think that congestion is serious enough to warrant building a new road. Robin Odams, Regional Manager TNZ believes that traffic congestion is caused by peak hour commuting and is only a serious problem for twenty to thirty minutes each weekday morning and evening (pers. comm). Therefore TNZ have offered to subsidise the cost of widening Cranford Street and establishing clearways to relieve congestion during these periods (the 'Francis B' Option). TNZ also believe that building the designated northern arterial will not relieve traffic congestion on Cranford Street because commuters use Cranford Street and Bealey Ave to align themselves with several streets in the inner city road network. A limited access road directly into the central business district would not have this function (Ibid: pers. comm.).

TNZ only finance roading projects with a high cost-benefit ratio which favours short-term incremental traffic management solutions with low capital investment (CCC Traffic and Roding Manager 1994: p.1, Stu Woods: pers. comm.). The high capital expenditure required to build the northern arterial (including property compensation) means that the cost-benefit ratios calculated by both TNZ and the CCC at between 1:2 and 1:4.5 are not cost-effective by TNZ's standards (Ibid: p.1, Ibid: pers. comm.). Cost-effective transport management is a requirement for TNZ under the TNZ Act 1989 S.3 and, TNZ believes, an important part of promoting sustainable management (Robin Odams: pers. comm.).

Passage of the RMA 1991 has given TNZ two additional reasons for not funding the northern arterial road. Firstly, under the RMA 1991 S.184 a designation order is limited to five years without work being started unless otherwise provided for in a district plan and, as aforementioned, TNZ cannot finance a northern access road within the next ten years. TNZ has interpreted this section to mean that sustainable management should be promoted in the RMA 1991 by short-term planning rather than long-term projects which may not meet changing transport needs and which may unnecessarily restrict other uses of resources (Robin Odams: pers. comm.). Secondly, TNZ does not believe that

building the northern arterial road promotes sustainable management of natural and physical resources for three reasons: it does not make use of existing road facilities and wastes good housing stock; it has adverse environmental effects on the residents of St Albans which cannot be satisfactorily avoided, remedied or mitigated; and building a northern arterial road encourages people to take their cars into the inner city which compounds inner city traffic congestion and parking problems (Odams et al 1994: p.130, Robin Odams; pers. comm.).

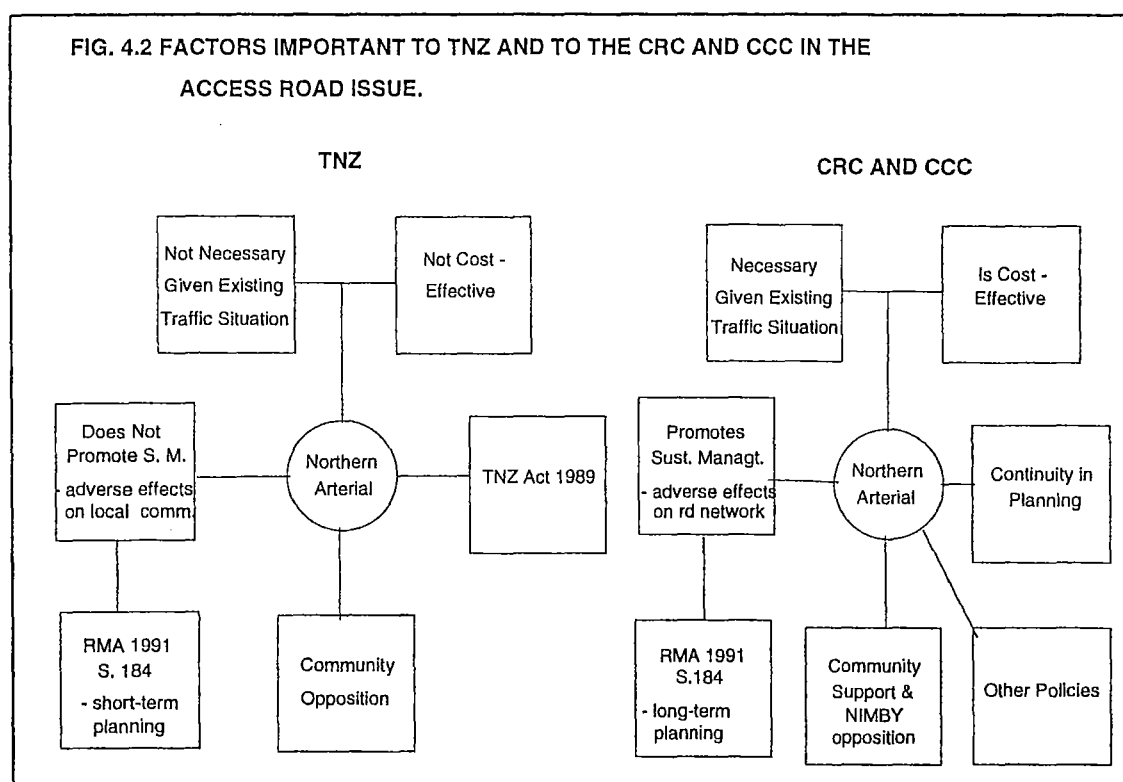
The adverse environmental effects considered by TNZ in promoting sustainable management of the road network include both temporary effects during construction and permanent effects from roading proposals on residents, all road users including cyclists and pedestrians, and on the community as a social unit (Odams et al 1994: p.39). Both direct effects such as air pollution, noise and intrusion, and 'down-stream' effects on other areas such as effects on inner city traffic congestion are considered (Ibid: pers. comm.). TNZ realises that alternative traffic management techniques to building a northern arterial road such as widening Cranford Street and the existing traffic situation also have adverse environmental effects on motorists, residents and the environment. Therefore sustainable management is promoted in traffic management by doing the most practical option to manage the given situation in terms of technical feasibility; cost-effectiveness; minimising adverse environmental effects; and that which is *socially acceptable*. On the basis of these assessments building a northern access road is considered to be transferring the environmental effects and 'costs' of traffic from one residential area to another rather than relieving overall environmental effects of traffic congestion (Robin Odams: pers. comm.).

Strong local opposition to building the northern arterial road is the final decisive factor in TNZ's decision. Robin Odams commented that TNZ may not have moved so quickly to remove the NRB designation had it not been so unpopular with St Albans residents even after twenty-eight years (pers. comm.).

THE CANTERBURY REGIONAL COUNCIL AND THE CHRISTCHURCH CITY COUNCIL:

The CCC and the CRC support retaining the NRB designation on St Albans properties and building a northern access road to manage traffic congestion on

Papanui Road and Cranford Street. As Figure 4.2 depicts the factors which are important to both councils in the northern access road issue are similar to those considered by TNZ, but whereas TNZ argues that building a northern arterial road is not cost-effective and does not promote sustainable management, the CCC and the CRC argue the contrary. This disagreement results because TNZ and the two councils interpret the existing traffic situation and therefore the appropriate traffic management techniques differently. The concept of sustainable management and other policies and arguments are interpreted and used in a way which supports the traffic management technique which each



authority wants to put in place.

Whereas TNZ interprets the traffic situation on Cranford Street to be severe for a short period during peak commuting times, the CCC and the CRC interpret their data to suggest that traffic congestion is at an unacceptable and increasing level for several hours throughout the day. Therefore clearways are not appropriate because they would need to operate for several hours each day (Stu Woods: pers. comm.). Traffic congestion is exacerbated by the many intersections along Cranford Street and Papanui Road and by friction with local traffic generated by residential and commercial landuses along these roads (CCC Traffic and Roding Manager 1994: p.1). Therefore a limited access road

with controlled adjacent land uses is thought to be necessary and that alternative traffic management options are only delaying rather than preventing the need for a northern access road (Stu Woods: pers. comm.).

Because the CCC and the CRC interpret the traffic situation differently from TNZ they also argue that building a northern arterial road is much more cost-effective than TNZ claims. The CCC disputes TNZ's high cost-benefit criteria for funding roading projects because it is biased against long-term traffic management options which require high capital investment but which are more permanent solutions to traffic congestion than incremental road widening (CCC Traffic and Roding Manager 1994: p.7). The CCC also disagrees with TNZ's formula for calculating cost-benefit ratios which does not quantify 'intangible' benefits such as reducing vehicle emissions; and ignores that other major roads in Christchurch have had operating benefits double those predicted in preconstruction cost-benefit analyses, for example the Southern Arterial (Stu Woods: pers. comm.).

Both councils argue that they have a statutory obligation to support building a northern arterial road under the RMA 1991 S.367 because it is a provision of the operative Canterbury Regional Planning Scheme (Max Barber: pers. comm.). This scheme was formulated under the Town and Country Planning Act 1977 so only provisions of the scheme which are not inconsistent with promoting sustainable management have to be considered in resource management (RMA 1991: S.367). Therefore if the CRC and the CCC do not think that building a northern access road promotes sustainable management then they have no statutory obligation to support retaining the designation.

The CRC and the CCC apply sustainable management to the road network in a similar way to TNZ - a technically feasible and cost-effective traffic management technique which has fewer adverse environmental effects than the existing traffic situation and which considers the needs of future generations (CCC 1992: p.1, CRC 1993a: pp56-57). What differs between TNZ and the two councils is the way in which these aspects of sustainable management are applied to the traffic issue. The CCC promotes sustainable management through considering a wide variety of temporary and permanent, and direct and

'downstream' effects of traffic management options in a similar way to TNZ. Works Consultancy Services Ltd assessed the 'Francis B' option; the designated northern access route; and an alternative Cranford-Madras Streets route for the CCC. Effects assessed included those on: property and property access; community severance and access to facilities; disruption during construction; heritage and conservation values; and effects on pollution, noise, vibration et cetera (Works Consultancy Services Ltd 1991: pp 34-36). The difference in effects assessments is not what is assessed but what effects are considered to be most important. Each authority appears to prioritise the adverse environmental effects which will be mitigated by the traffic management option which the authority wants. Therefore TNZ focuses on the adverse effects on the residents of St Albans of the northern arterial being built and the CCC and CRC emphasise the adverse effects on the road network and on residents of Cranford Street and Papanui Road of not building the road. The CCC argue that opposition from St Albans residents to the northern arterial designation is NIMBY politics (Not In My Back Yard) - residents looking after their 'private' interests at the expense of the 'public' good, and an inevitable consequence of any major road construction (Stu Woods: pers. comm.).

Whereas TNZ interprets S.184 of the Act to encourage short-term planning horizons which do not unnecessarily restrict resource uses for future generations, the CCC argue that long-term designations can be used to provide the opportunity for future generations to meet their reasonably foreseeable needs if provided for in a District Plan (RMA 1991 S.184). A long-term northern arterial designation is justified as providing for a reasonably foreseeable transport need of future generations (CCC Traffic and Roading Manager 1994: p.2, Stu Wood: pers. comm.).

To criticisms that building roads encourages private motor vehicle use which is unsustainable, both councils have strategies to discourage increases in private motor vehicle use but argue that they must also manage immediate transport needs (Mike Calvert: pers. comm.). An efficient road network is argued to reduce fossil fuel consumption and pollution because vehicles are idling and accelerating less frequently (CRC 1992-92: p.21). In response to TNZ's argument that building a northern arterial road does not use existing facilities

and wastes housing stock, the CCC argues that the 'Francis B' option is only a ten year solution to traffic congestion after which a northern arterial will still be needed, and that the houses are not unique examples of 1920s Christchurch housing stock (Stu Woods: pers. comm.).

Other resource management policies and arguments are also used by both the CCC and the CRC to support building a northern access road. For example, the northern arterial is argued to promote the Canterbury Regional Planning Scheme's settlement policy and long-term strategic plan which encourages settlement and development of horticulture, forestry and tourism activities in North Canterbury (CRC 1990: B7, CUC 1985: p.15, Max Barber: pers. comm.). Building a northern arterial road would also support objectives in the new City Plan (currently draft only) as well as meeting the existing objectives of the operative City Scheme. For example, promoting the inner city by providing good access to it (CCC Traffic and Rounding Manager 1994: p.8); and encouraging alternative modes of transport such as walking, cycling and public transport by making residential roads safer and traffic flow more efficient, respectively (Stu Woods: pers. comm.).

The final important factor to the CCC's and the CRC's continued support for building a northern arterial road is that the northern arterial provides 'continuity in planning.' This factor is considered to be important because: the rest of the road network in the area has been designed on the expectation that a northern arterial would be built; because it is 'unfair' on those businesses which have located in the area on the expectation that the road would be built; and because a lot of time and resources have been invested in the proposal which will be 'wasted' (CCC Traffic and Rounding Manager 1994: p.3, Stu Woods: pers. comm.) Given that the RMA 1991 is reforming legislation these arguments provide a salutary reminder that changes in legislation are only one factor in resource management.

Neither council has dismissed all alternative options to building a northern arterial road, however. Without TNZ's financial support the road becomes less economically feasible to build. The CRC is considering the possibility of building a new road along the Papanui rail corridor or modifying two or three existing

roads in the area (Max Barber: pers. comm.). The CCC is reassessing the traffic situation and all options based on traffic data collected in the recently completed Christchurch Transport Study (Stu Woods: pers. comm.).

4.4.2 POLITICAL REPRESENTATIVES - THE CHRISTCHURCH CITY COUNCILLORS:

It was the Christchurch City Councillors who voted not to take over the NRB's northern arterial road designation on St Albans properties on May 25th 1994. Although the councillors voted by a majority to avoid possible legal repercussions of taking over part of a designation under the RMA 1991 S.179, the councillors have been as divided as their constituent wards over building a northern arterial road. Canterbury Regional councillors have also been divided in their support and opposition to the designation for similar reasons, but is the Christchurch City councillors who make the decision as to which traffic management option the CCC adopts for the area.

Councillors are elected political representatives of the community and most also belong to a political party. The first two factors which influence Councillors' understandings of the northern road access issue are their personal and political commitments. Some Councillors and the wards that they represent are directly affected by the northern road access issue and because building the access road relieves traffic effects for some residents at the expense of others, Councillors are divided over the issue depending on who they represent. For example, Councillor Ron Wright lives in Papanui Road and sympathises with residents' concerns about the safety, noise and vibration effects of heavy vehicles on Papanui Road (pers. comm.); and Councillor Garry Moore was a member of the SARA opposing the northern arterial designation before his election to the CCC (pers. comm.). St Albans is a traditional 'labour' area so the northern access issue is considered by Labour Councillors as: "building a 'Tory' road through a 'Labour' area" (Garry Moore: pers. comm.). Therefore political party allegiance determines how many councillors whose wards are not directly affected by the issue perceive building a northern arterial (Stu Woods: pers. comm, Councillor Linda Constable: pers. comm.).

The third variable of concern to the Councillors is the cost of building a northern

access road particularly when TNZ will not subsidise these costs. For some Councillors the northern access road issue is a question of what the City can afford and the apparent reason why the road has never been built is because there has never been funds available to do it (Councillor Garry Moore, Environmental Policy and Planning Manager John Dryden, Councillor Diana Shand, pers. comm.).

The fourth factor which contributes to divisions among Councillors on the northern access road issue is the need to provide St Albans residents with a definite decision and an end to speculation about whether the road will go ahead. For councillors that support building the road this certainty is best achieved by retaining the designation and expectation that the road will be built (Ron Wright: pers. comm.). For Councillors who oppose building the road certainty for St Albans residents is best achieved by ending the twenty-eight year designation and establishing a publically approved traffic management option and definite timetable for development *before* any more decisions are made which affect the community (Garry Moore, Linda Constable: pers. comm.).

Ideas on whether the current traffic situation needs addressing; whether a northern access road is the most suitable traffic management option to do this; and whether building a northern access road is promoting sustainable management in terms of the RMA 1991, tend to vary among individual councillors depending upon their knowledge of and experience with the issue, traffic management and the RMA 1991. A division exists in both councils between councillors who are approaching the RMA 1991 and the concept of sustainable management as a new resource management philosophy and those who interpret it as 'business as usual.' From speaking with Councillors on a variety of resource management issues there appears to be a general understanding that it is the responsibility of planners to ensure that resource management options are compatible with legislation and policies and that it is the role of councillors to ensure that those 'technical' options are fiscally and socially acceptable to the local community.

4.4.3 COMMUNITY INTEREST GROUPS:

Building a northern arterial road is a much publicised local government resource management issue in Christchurch and the latest decision by the CCC not to take over the NRB's property designations in St Albans from TNZ has received both support and opposition from individuals and groups representing residential, transport and environmental interests. For the purposes of this research the SARA, the Shirley-Papanui Community Board and the Merivale Precinct Society have been identified as the most involved community interest groups in the issue.

THE ST ALBANS RESIDENTS' ASSOCIATION:

The SARA was originally formed in 1966 by five or six homeowners whose properties had been placed under designation by the then NRB (Muriel Soanes, founding member of the SARA: pers. comm.). The group formed as an explicit response to the resource management issue and have rallied the St Albans community to oppose the designation as opportunities have arisen to do so over the last twenty-eight years (Ibid: pers. comm.). The focus of the SARA was not to oppose the designation per se but to find out if and when the road would be built, and to secure better financial compensation for residents who were selling property to the NRB (Ibid: pers. comm.). As the designation continued but the road was not built the SARA became concerned about the effects on the community of planning blight and the consequent devaluing of properties in the area. Ms Soanes explained that residents have not been allowed to make any alterations which add value to their homes since 1966 (a condition of the designation, Muriel Soanes: pers. comm.). When the SARA took the matter to the Planning Tribunal in 1987 the association argued that the designation had adverse economic, social and environmental consequences for the community and was contrary to the public interest under the Town and Country Planning Act 1977 S.3 and S.4 (SARA 1985: p.3). The association did not want to appear to be 'selfish' by arguing purely in their own 'economic' interests as homeowners (Muriel Soanes: pers. comm.).

The SARA do not think that the traffic congestion in the area is serious enough to warrant building a new road through St Albans or widening Cranford Street. The association do not want Cranford Street residents to go through the same ordeal which they have experienced, and feel that traffic management should

use the existing street network (Muriel Soanes: pers. comm.). The association is also angry at the way in which St Albans residents have been treated in this resource management issue with what Muriel Soanes considered to be hostility from the NRB and both councils, though she notes that TNZ have been much more pleasant to deal with (pers. comm.). Ms Soanes gave the example of how when she refused to sell her property to the NRB in the late 1960s the CCC rezoned the section she owned adjacent to her home as 'rural' so that it could not be built on. Ms Soanes then decided to sell that section to the NRB and was told that she would have to pay for a fence between the two sections. When Ms Soanes questioned this she was told that she could: "take them (the NRB) to court, but that she wouldn't win" (Muriel Soanes: pers. comm.).

These two factors indicate that for the SARA there is a broader concern in this resource management issue than 'NIMBY' opposition as claimed by the CCC. The SARA are concerned about the effects on any residents of having their property designated to build a road and the way in which that action is considered to be acceptable for the 'public' good.

In twice appealing the northern arterial designation to the Planning Tribunal, the SARA have more experience than many community interest groups in dealing with the public planning process and using the appropriate clauses in legislation to argue for a desired outcome from a resource management issue. In 1982 the SARA appealed to the Planning Tribunal that the northern arterial designation shown in the City Planning Scheme review was incorrect under the Town and Country Planning Act 1977 S.118 and S.122; and again in 1987 that the Transport Study Working Groups' recommendation to build a northern arterial road was inconsistent with S.3 and S.4 of that same Act. The SARA was interested in TNZ's interpretation that the northern arterial designation was inconsistent with S.184 of the RMA 1991 (Muriel Soanes: pers. comm.). As with regulatory authorities the SARA has used legislation in the past to support their particular understanding of the resource management issue.

More than anything else the SARA want the northern access issue to be finally resolved. TNZ's uplifting of the designation is welcomed but St Albans will take a long time to recover from planning blight (Muriel Soanes: pers. comm.),

illustrated in the plates in Figure 4.3.

FIG. 4.3 EFFECTS OF THE NORTHERN ARTERIAL DESIGNATION ON ST ALBANS.



Madras St - recently resurfaced and rekerbed road, but the houses are derelict due to the northern arterial designation.



Twenty-seven houses were demolished to build this cross-link between Forfar and Cranford Streets in anticipation of the Northern Arterial in 1988.

The issue is not resolved until the CCC make a decision on the traffic management option that they will make provisions for in the new City Plan (there are no provisions for northern access in the current draft City Plan).

THE SHIRLEY-PAPANUI COMMUNITY BOARD AND THE MERIVALE PRECINCT SOCIETY:

The Shirley-Papanui Community Board and the Merivale Precinct Society are established residential organisations which have become involved in the Northern Arterial issue as a result of TNZ uplifting the NRB designation and the CCC's decision to reassess traffic management options for the area. Both groups are concerned about the effects of the existing traffic situation and proposed solutions on the local residential community.

The Shirley-Papanui Community Board opposes continuing the northern arterial designation and building the road because it is perceived as an unnecessary and expensive solution to what is interpreted to be a small, peak hour traffic congestion problem. The Board wants the CCC to consider a whole host of traffic management techniques including some more innovative solutions such as 'park and ride' schemes or to undertake a combination of intersection widening and traffic signal controls (Hazel Ashton, Papanui-Shirley Community Board: pers. comm.). Like the SARA the most important factor for the Shirley-Papanui Community Board in the issue is not so much how the traffic is managed but that the issue is resolved once and for all - either the road is built or the idea abandoned, because of the planning blight in St Albans (Ibid: pers. comm.). As a community board the group has some understanding of the public planning process and the RMA 1991. Hazel Ashton claims that when the Board asked the CCC how the northern arterial designation would fit in with the provisions of the RMA 1991 they were told by the staff that the RMA 1991 would not affect the northern arterial issue (pers. comm.).

The Merivale Precinct Society supports building a northern access road as one way to relieve traffic congestion on Papanui Road and consequent 'rat-running' in residential streets, particularly by heavy vehicles who will be attracted by quick uninterrupted access into the inner city (Merivale Precinct Society President John Thacker: pers. comm.). The Society also supports building a

northern arterial road for the good of the larger Christchurch community because like the SARA they do not want to appear to be self-interested. Similarly, they argue that the road would also provide substantial relief for residents on Cranford Street (Ibid: pers. comm.). The Society claims to sympathise with the St Albans residents but notes that they have known about the designation for nearly thirty years; and believe that much opposition may be from the expectation that the road will be a motorway rather than the attractive landscaped roads which are built today (John Thacker: pers. comm.). The Merivale Precinct Society has studied the RMA 1991 but base their policies and ideas for neighbourhood improvement on the living environment and resource management situations which exist and suggestions for improving them (Ibid: pers. comm.).

As with the SARA, neither the Shirley-Papanui Community Board or the Merivale Precinct Society feel that the issue is now resolved by TNZ uplifting the designation. The Shirley-Papanui Community Board are aware that the CCC may want to put in place its own designation to build a northern access road through St Albans (Hazel Ashton: pers. comm.). The Merivale Precinct Society think that removing the designation is delaying rather than avoiding a new road because the traffic situation still exists and is predicted to increase (John Thacker: pers. comm.). Both groups also argue that there are broader environmental and sustainability issues associated with building a northern arterial road which are used to support their respective stances on the issue. Members of the Shirley-Papanui Community Board oppose traffic management options which cater for private motor vehicle use because this mode of transport is energy inefficient and relies on fossil fuels (Hazel Ashton: pers. comm.). The Merivale Precinct Society argues that private motor vehicles will be used by people anyway and resulting adverse environmental effects are better mitigated if vehicles are used on properly designed roads (John Thacker: pers. comm.).

4.5 SUMMARISING SUSTAINABLE MANAGEMENT:

Evaluating the proposal in terms of promoting sustainable management under the RMA 1991 S.5 was only a concern for TNZ and the CCC and CRC. Other

key groups involved in the issue were all aware of the RMA 1991 and considered broader environmental arguments about encouraging the use of private motor vehicles as an energy inefficient form of transport but these arguments were not readily linked with the RMA 1991 and the concept of sustainable management. Yet, whether aware or not, all groups were promoting a form of sustainable management by trying to avoid, remedy or mitigate what they considered to be the important adverse environmental effects of the traffic issue. In fact, as the table in Figure 4.4 summarises, the factors which are important to each group in the northern arterial issue and the understandings of promoting sustainable management in the issue by TNZ and the two councils are all very similar.

FIG. 4.4 SUMMARISING SUSTAINABLE MANAGEMENT.

GROUPS	Aware S.M.	Effects - phys. envt.	Effects - comm.	Indirect Effects	Temp/Per effects.	Site specific	Future Gens.	Resources used	Cost - effective
TNZ	Yes	Yes	Yes	Yes	Both	Yes	Yes	Yes	Most Impt.
CRC	Yes	Yes	Yes	Yes	Both	Yes	Yes	No	Yes
CCC	Yes	Yes	Yes	yes	Both	Yes	Yes	No	Yes
Councillors	Some	Yes	Most Impt.	Some	Perm.	V. Impt.	Some		V. Impt.
SARA	RMA yes	Some effects	Most Impt.	Some	Perm. Impt.	Most Impt.	No	No	Yes
Shirl-Pap C. Bd.	Yes	Yes	Most Impt.	Yes	Perm. Impt.	Most Impt.	20 years		Yes
Merivale Pre. Soc.	Yes	Yes	Most Impt.	Yes	Both	Most Impt.	20 years		Yes

All groups were concerned about the adverse effects of the existing traffic situation, the designation, and of building a northern arterial road on both the bio-physical environment and on residential communities. The CCC, the CRC, and TNZ understood sustainable management to include assessing temporary and permanent effects, and direct and 'down-stream' effects of the traffic situation and traffic management options; and that those options had to be cost-effective, allow resources to meet the reasonably foreseeable needs of future generations, and to improve the existing traffic situation.

Despite regulatory authorities considering the same sorts of factors in promoting sustainable management, TNZ concludes that building a northern arterial road does not promote sustainable management whereas the CCC and the CRC conclude that it does. This difference in conclusions is a prime example of the 'elasticity' of sustainable management as a concept, and the way in which resource management legislation fits into resource management practices. For example, in assessing the adverse environmental effects of building a northern arterial road TNZ, the CCC and all other groups involved put different emphasis on the relative importance of the adverse effects of building the road on St Albans residents, and the adverse effects on other residents and motorists of the existing traffic situation. Similarly, whereas TNZ interpreted sustainable management as encouraging short-term planning which does not unnecessarily restrict landuse activities, the CCC interpret sustainable management as making proactive provision for future transport needs by putting in place long-term designations.

These different applications of sustainable management arise because the RMA 1991 and promoting sustainable management is not used for making traffic management decisions. Rather it is used to justify decisions which are made on the basis of the established traffic management techniques and available fiscal resources. As Councillor Linda Constable described: "sustainable management is a 'cling on' not a *raison d'etre* for doing things" (pers. comm.).

4.6 FACTOR ANALYSIS:

The differences in the way in which key groups understand the northern arterial resource management issue results from a combination of structure-culture, situational and external factors which determine what is important to each group in the issue. Structure-culture factors will be discussed first because these factors determine how each group understands the traffic situation, and therefore appropriate traffic management options. Situational factors create the traffic situation, and determine what options are geographically feasible and therefore cannot be considered independently of structure-culture factors. External factors, factors not directly related to the issue or the groups involved, have also influenced the northern arterial resource management issue.

4.6.1 STRUCTURE-CULTURE FACTORS:

The structure-culture factors which have shaped the northern arterial resource management issue are: the way in which the traffic situation is interpreted and what are considered to be appropriate traffic management techniques; the functions of each group and the resources they have available to undertake those functions; and what regulatory authorities and councillors understand to be the intentions of the RMA 1991 in promoting sustainable management.

All key groups involved in the northern arterial issue agree that there is a traffic congestion problem in the area which requires some form of traffic management. The community interest groups and councillors accept that it is the responsibility of traffic planners to provide the appropriate traffic management option but residents in St Albans feel that that option should be decided after consultation with and consideration of the effects on local residents (Hazel Ashton, Muriel Soanes: pers. comm.). The CCC has consulted with the local community over the recent option of taking over the NRB designation but the Shirley-Papanui Community Board feel that that consultation was to 'sell' the northern arterial to St Albans residents not to consider alternative traffic options (Hazel Ashton pers. comm.).

The transport aims and traffic management methods of the CCC, the CRC and TNZ determine the traffic management options which are considered for the area. All three authorities want to manage traffic congestion by increasing the road capacity. It is the magnitude of that increase not the principle of providing more road space for private motor vehicles upon which TNZ and the two councils disagree. TNZ, the CRC and the CCC have similar approaches to traffic management because under the Town and Country Planning Act 1977 S.37 district planning schemes had to adhere to the provisions in regional planning schemes so CRC and CCC traffic planning was co-ordinated; and under the National Roads Act 1953, the NRB provided guidance and finance for local roading. Under the TNZ Act 1989 and the RMA 1991 transport policies cannot be inconsistent between TNZ, regional and territorial authorities.

The land transport objectives of all three regulatory authorities are very similar and are based on providing an efficient transport system while meeting safety, social and environmental needs. These objectives, like the concept of

sustainable management, are quite ambiguous outlining several factors to be considered in the road network but not stating which factors are most important. Therefore, as with promoting sustainable management, these objectives can be argued to be achieved using different traffic management techniques. For example, TNZ's land transport objective is:

"To promote policies and allocate resources to achieve a safe and efficient land transport system which maximises economic and social benefits" (TNZ Act 1989: S.3).

The CRC's land transport objective is: "meeting the transport needs of the community in a sustainable way within acceptable environmental limits" (CRC 1992-93: p.19);

and that of the CCC is: "an efficient, safe and sustainable transport system in the City which provides for ease of accessibility for people and goods" (CCC 1992: p.15).

These transport objectives are promoted by establishing a road hierarchy whereby major arterial roads are used for journeys and local roads to access residential property. This hierarchy is accepted as safer and more efficient than allowing traffic to use any roads (the 'sponge' effect). Motorists are encouraged to use the road hierarchy by maintaining a 'level of service' - a standard of traffic flow on arterial roads so that motorists are not tempted to take 'short-cuts' through residential streets (CRC 1990: pp 7-8, CCC 1986: pp 35-36). Therefore congestion on arterial roads is a traffic problem for all three regulatory authorities because it indicates a decreased level of service. Three alternative traffic management techniques are considered for all traffic situations: to 'do nothing,' to increase the road capacity; and/or to manage traffic demand. All three authorities decided to increase the road capacity to relieve traffic congestion because of a combination of the road network in the area and the transport behaviour of Christchurch residents. These factors in combination with the basic principles of traffic management followed by TNZ, the CRC and the CCC mean that alternative traffic management techniques suggested by other groups such as more fully utilising existing streets (Muriel Soanes, Garry Moore: pers. comm) are dismissed by regulatory authorities as

not being technically 'suitable' options for road management.

The second set of structure-culture factors which has influenced the northern arterial issue is the functions and resources of the key groups involved. The reason why TNZ has not continued with the NRB's northern arterial designation through St Albans even though TNZ took over the functions of the NRB under the TNZ Act 1989 S.13 is because TNZ has different functions and resources from the NRB. Whereas the NRB was responsible for providing a safe and efficient *road system* TNZ is responsible for *all land transport* in New Zealand and claims to have fewer resources and greater fiscal responsibility to government than the NRB (TNZ 1993: p.12). Therefore TNZ has less money to spend on building roads than the NRB had, and uplifted the northern arterial designation because it can not justify the expense of building a new road parallel to an existing road network (Robin Odams: pers. comm.). Without TNZ's financial support the CCC cannot afford to build the northern arterial road (Stu Woods, Garry Moore: pers. comm.).

The availability of resources was also important to the success of the SARA in taking the northern arterial designation to the Planning Tribunal on two occasions. Although the SARA lost both cases their strong opposition to the proposal was facilitated by having members who were professionals in transport planning (John Foster) and resource management (Jan Wright), and the support of local MPs David Caygill and Geoffrey Palmer. Muriel Soanes discussed the value of having these people who were not 'phased' by the technical and legal jargon which the NRB and the councils tended to "throw" at residents (pers. comm.).

TNZ as a new authority can criticise the northern arterial as expensive and inappropriate without losing professional credibility as transport managers. It is much harder for the CRC and CCC transport planners, some of whom have supported the northern arterial proposal for many years, to abandon the project without losing professional credibility. Stu Woods, traffic planner with the CCC, said that while uplifting the designation gave the CCC the opportunity to reassess the traffic situation, if a more appropriate option to building a northern arterial road was found: "it would be embarrassing to admit that we got it (the

designation) wrong" (pers. comm.).

The different functions and responsibilities of the regulatory authorities, councillors and community interest groups means that each group perceives building an northern arterial road from different spatial scales. TNZ is responsible for all land transport in New Zealand so the need for a northern arterial is considered alongside other land transport needs throughout New Zealand. Although congestion on Cranford Street and Papanui Road is significant relative to the rest of Christchurch, compared with congestion in Auckland and Wellington it is not very severe (Robin Odams: pers. comm.). Similarly the staff of the CRC and CCC consider the northern road access issue in terms of transport planning for the whole of Canterbury and Christchurch, respectively. In this context, the loss of some St Albans properties is justifiable for the transport gains to the whole region and city (Max Barber, Stu Woods: pers. comm.). The community interest groups involved in the issue, however, are residents' associations whose personal property and living environment are affected by either the existing traffic situation or the designation. The focus of these groups is on the impact of the proposal on their local area not on road access for Christchurch, and they are committed to redressing adverse effects on their neighbourhood. This is known as NIMBY (Not In My Back Yard) politics among planners and tends to be considered to be 'self interest' at the expense of the good of the broader community.

This difference in spatial scales at which the issue considered makes it controversial because councillors have a dual function of making resource management decisions which are in the best interests of both their local ward and the city as a whole. The relative importance which individual councillors put on these two responsibilities depends on the personal and political values of the councillor and may vary from issue to issue. In the northern arterial issue this division has become political because the local communities affected by the current situation and the designation support different local political parties, but as the Travis Swamp case study will illustrate councillors are not always divided along party lines.

The final set of structure-culture factors which has contributed to controversy

over building a northern arterial road is the way in which regulatory authorities and councillors have interpreted the intentions of the RMA 1991 in promoting sustainable management. Whereas TNZ has a basic understanding that to build new roads where a road network already exists is not promoting sustainable management, the CCC and the CRC are prepared to do so if the road meets the objectives of the City Plan and is cost-effective (CCC 1994: p.5). TNZ promote sustainable management in roading by reducing use of, reusing and recycling materials; and the adverse effects of building new roads are assessed relative the existing land uses in the area (TNZ 1993: p.1). Therefore building a new arterial road through a residential area and running parallel to an existing road network is not promoting sustainable management irrespective of the levels of traffic congestion on the existing network (Robin Odams: pers. comm.).

The CCC's and the CRC's approach to promoting sustainable management is based on meeting existing transport needs and using long-term strategies to reduce increased use of motor vehicles (Max Barber, Mike Calvert: pers. comm.). Sustainable management is a long-term goal for both the City and the Region (CRC 1993b: p.1, CCC 1992: p.2). These two approaches are indicative of two interpretations of promoting sustainable management in resource management: that sustainable management is 'business as usual' but by managing environmental effects rather than resource activities; and a more innovative approaches which consider some of the indirect and longterm effects of resource uses on the environment and on resource sustainability.

This same division exists between councillors. Some councillors such as Linda Constable and Garry Moore want the CCC to consider more innovative transport management policies which reduce the need and demand for private motor vehicle use(pers. comm). Other councillors argue that current traffic needs must be met and that the CCC should respond to community demands for alternative transport rather than taking the lead (Cr Ron Wright: pers. comm.). Linda Constable believes that the complex, ambiguous definition of sustainable management contributes to a 'business as usual' approach to promoting sustainable management among many councillors because the concept is too difficult to grasp (pers. comm.).

4.6.2 SITUATIONAL FACTORS:

Structure-culture factors which determine how traffic is managed and sustainable management is promoted must be applied to the particular traffic situation in order to create a controversial resource management issue such as that surrounding building a northern arterial road in Christchurch. Three situational factors have shaped this case study.

Firstly, the landuses in the area generate more traffic than the existing road network can cope with which causes congestion. As Max Barber notes, this situation occurs irrespective of the current planning philosophy (pers. comm.), and the landuses and road network determine what traffic management techniques are technically feasible. For example, the large number of intersections along Cranford Street means that the CCC does not think that clearways along Cranford Street will relieve congestion because of the delays at intersections (Stu Woods: pers. comm.). Similarly, the surrounding residential landuses means that: widening existing streets will not relieve friction between local and 'through' traffic; that building a new road is very expensive because of the high value of the land to be designated; and that no matter which part of the road network is increased, residential property will be affected and therefore the outcome will be controversial.

Secondly, the long time of the northern arterial designation has also made the issue very controversial. Twenty-eight years of planning blight and no road built has made St Albans residents very resentful towards the CCC wanting to continue the designation (Hazel Ashton, Muriel Soanes: pers. comm.), and residents along Cranford Street angry that the opportunity to build the road was not used and that they are now experiencing adverse traffic effects on their residential environment (John Thacker, Cr Ron Wright: pers. comm.). This opportunity to build a new road also tends to predispose planners in considering traffic management techniques toward building a northern access road (Stu Woods: pers. comm.).

Thirdly, because the developers in this resource management issue are also regulatory authorities it makes opposing the proposal difficult for community interest groups. Regulatory authorities are considered to undertake proposals

for the 'public good' whereas opposing groups are considered to be acting out of 'self interest.' All three community interest groups emphasised that their actions were for the 'good' of the community so that they would not appear 'selfish' (Hazel Ashton, Muriel Soanes, John Thacker: pers. comm.). Because the NRB and both councils supported the northern arterial proposal, the SARA directed their campaign to the Minister of Transport and other central government cabinet ministers. The community interest groups feel disadvantaged because they do not have access to the knowledge and resources of regulatory authorities and that there is no one to mediate between the two sides. Both the SARA and the Shirley-Papanui Community Board commented on 'bad' relations between themselves and the CCC. The Community Board believes that St Albans has been 'starved' of other resources by the CCC as punishment for 'kicking up a fuss' about the northern arterial (Hazel Ashton: pers. comm.).

4.6.3. EXTERNAL FACTORS:

A variety of external factors have influenced the role of different groups in the northern arterial issue. External factors affect the way in traffic can be managed in Christchurch. Max Barber argues that Christchurch's low population, widespread settlement, and public transport system which relies on an efficient road network makes it difficult to 'congestion plan' in Christchurch - that is, to let traffic congestion build up so that people will use other modes of transport (pers. comm.). Similarly, the personal preference of people for driving cars means that car use is expected to continue to increase for the next twenty years irrespective of increases in fuel prices (CCC Traffic and Roding Manager 1994: p.5). The CCC, the CRC and the Merivale Precinct Society all argue that because people will continue to drive cars the best way to manage the consequent adverse environmental effects is to concentrate cars on purpose built roads (Max Barber, John Thacker, Stu Woods, Ron Wright: pers. comm.).

Transport behaviour in private motor vehicles is also very difficult to measure. One of the arguments against building a northern arterial road by TNZ and several Councillors is that there is not enough data on travel patterns in the area to be certain that a northern access road will relieve congestion on

Cranford Street (Robin Odams, Linda Constable, Diana Shand: pers. comm.). There also seems to be some confusion between CCC staff and councillors as to the exact traffic situation which a northern arterial road is designed to address. For example, Councillor Ron Wright supports a northern arterial to relieve heavy traffic on Papanui Road (pers. comm.), but traffic planner Stu Woods claims that heavy vehicle numbers on Papanui Road are only slightly higher than the City average and that the CCC staff are more concerned about congestion on Cranford Street (pers. comm.).

The provisions of the RMA 1991 have contributed to controversy over building a northern arterial road in two ways. Firstly, because the RMA 1991 is new legislation standard interpretations of most sections of the Act have yet to develop. Different interpretations of other sections of the RMA 1991 apart from S.5(2) also influence the northern access issue, for example different interpretations of S. 179, the legality of transferring a designation; and S. 184 lapsing of a designation after five years. Secondly, promoting sustainable management means that more effects from roading proposals have to be evaluated and better managed than under previous legislation. In this sense promoting sustainable management is an external factor in the resource management issue because roading is a landuse which has to be evaluated against all other landuses under the RMA 1991, it is not a 'right' of landuse as under the Town and Country Planning Act 1977. TNZ note that the Planning Tribunal have emphasised this change in assessing roading proposals, ruling that the effects on communities from roading proposals are as, if not more, important than the effects on traffic (Clough 1993: pp39-40, Robin Odams: pers. comm.). In this context TNZ does not believe that the Planning Tribunal would uphold that building a northern arterial is promoting sustainable management (Robin Odams: pers. comm.). Promoting sustainable management has not altered the way in which traffic is managed, but it has the potential to do so if managing the effects of building and widening roads becomes fiscally infeasible.

Inconsistencies in central government transport policies have contributed to TNZ's opposition to and the CCC's and the CRC's support for building a northern access road. As a crown agency TNZ has to follow the Ministry of

Transport's directive to discourage use of private motor vehicles in urban areas where traffic congestion already exists (Ministry of Transport 1991 in Odams et al 1994: p.26). Building a northern arterial road is considered by TNZ to encourage rather than discourage traffic into the inner city (Robin Odams: pers. comm.). At the same time, central government withdrawal of public transport subsidies is considered by both councils to leave few alternative transport options to catering for private motor vehicle use (Max Barber, Stu Woods: pers. comm.).

A combination of structure-culture, situational and external factors have shaped the controversial northern arterial resource management issue. Situational factors are considered by both councils to be the most important because it is these factors which give rise to the resource use conflicts involved in the issue. It is structure-culture and external factors, however, which determine how the resource use conflicts are interpreted and will be resolved. The RMA 1991 and promoting sustainable management is important to the issue largely as an external factor used to legitimise whichever option is selected for northern road access in terms of the law. Resource management law, in turn, influences the traffic management option to the extent that the adverse environmental effects of each option have to be avoided, remedied or mitigated.

4.7 CONTINUITIES AND CHANGES:

The northern arterial road issue is an excellent example by which to study continuities and changes in local government resource management issues before and after resource management law reform. Continuity in the issue has resulted because for over thirty years the CRC and the CCC and their predecessors have proposed to build a new road through St Albans to manage traffic congestion in the area. Change has resulted from TNZ uplifting the NRB's designation on St Albans property and refusal to support the proposal.

The CCC and the CRC have continued to propose building a northern arterial road despite: changes in resource management law and social values on the environment and private motor vehicle use; and despite resolute opposition from St Albans residents, for several reasons. Firstly, the landuses, street patterns and resulting traffic situation have not altered from that predicted in the

Master Transportation Plan 1959. Only the number of motor vehicles has been less than predicted and the road has been down-scaled accordingly. Secondly, the road network remains vital to Christchurch's economic and social activity and the aims of traffic planners in managing the network are still based on providing an efficient road network and managing adverse effects. For example, the transport objective for the CCC in the operative City Scheme formulated under the Town and Country Planning Act 1977 is:

to establish and maintain a safe and efficient system for the movement of people and goods and at the same time to protect living and work areas from the bad effects of excessive traffic (CCC 1985: p.35).

The CCC transport objective for the new City Plan formulated under the RMA 1991 is: "an efficient, safe and sustainable transport system in the City which provides for the ease of accessibility for people and goods" (adverse effects are included in 'sustainability' CCC 1992: p.15).

Therefore the purposes of building a northern access road are the same: to provide relief for traffic congestion on Cranford Street and Papanui Road; and to provide efficient access between the inner city and North Christchurch suburbs and North Canterbury settlements (Canterbury Regional Planning Authority 1982: p.27, Smith 1987: p.11, CCCTraffic and Rooding Manager 1994: p.5).

Thirdly, the way that the road network is managed to achieve these transport objectives has not altered - a road hierarchy is promoted by maintaining a level of service (Canterbury Regional Planning Scheme 1990: Pt II, Cl.3.1, Hassell 1987: P.2). Finally the public planning philosophy that the 'private good' of a few people may be sacrificed for the 'public good' of the community has not been challenged by resource management law reform. In testifying to the Planning Tribunal in 1987 a CCC staff member stated that:

"...the general feeling is that people are very defensive of their own backyard but are often prepared to accept serious degradation of the environment or quality of life elsewhere - particularly on older, narrow radial routes" (Gadd

1987: p.26).

In 1994 the CCC is still justifying the adverse effects of the northern arterial on St Albans residents as an acceptable trade-off against the effects on other residents and the City's motorists of the existing traffic situation.

The arguments against building a northern arterial road have also remained fairly constant over time despite changes in legislation. For example, the waste of housing stock; the impacts of noise and pollution on residents; the cost of the road, and using existing roads were the main objections to the designation in the review of the City Scheme in 1982 (CCC 1982). This continuity occurs because the effects of the proposal are the same and people become involved in resource management issues to mitigate the effects of conflicts in resource use on themselves.

The biggest change in the northern arterial issue has been TNZ's lifting of the NRB's designation, but that change may not be as significant as first appears. TNZ's initial reason for lifting the designation was that TNZ can not afford to fund the road in the next ten years, and according to CCC Environmental Policy and Planning Manager John Dryden, the reason why the northern arterial has never been built is because of the lack of funds to do it (pers. comm.). In this sense TNZ are simply changing the legal status of St Albans's properties to reflect economic reality. This change may also be short-lived if the CCC elect to place their own designation on properties in the area to build an access road.

TNZ's alternative traffic management option to widen Cranford Street (the "Francis B' option) is not a radical change in traffic management because it is still controlling traffic congestion by increasing the road capacity.

The most significant changes in the northern arterial issue resulting from the RMA 1991 seem to be that a wider variety of adverse environmental effects are more explicitly considered in assessing traffic management options, than under the Town and Country Planning Act 1977, and these effects have to be mitigated. This change has occurred because roading proposals have to be justified as a landuse promoting sustainable management under the RMA 1991

and are no longer a 'right' of landuse. Therefore a northern arterial built within the provisions of the RMA 1991 would be landscaped to mitigate visual effects, would have noise and vibration controls, and more residential land would be designated to ensure that remaining residents are an acceptable distance from the road.

4.8 CONCLUSION:

The northern arterial case study provides an excellent example of the 'elasticity' and 'ambiguity' of sustainable management as a concept and why it has not resulted in significant changes in local government transport management. Even though the northern arterial issue was supposedly very influential in the drafting of some sections of the RMA 1991 to ensure that long-term designations could not be placed on communities, the northern arterial can still be justified by the CCC and the CRC under the RMA 1991.

This chapter has illustrated that traffic management issues arise because of resource use conflicts in an area and are managed by a combination of the ideas on transport management, functions and resources of regulatory authorities which come up with 'technically' feasible options, and the influence of community interest groups and councillors who determine whether these options are socially and therefore politically acceptable. The nature of the resource use conflicts and the way in which traffic is managed means that all options considered will be controversial because they all effect personal property and therefore have clear 'winners' and 'losers' in the outcomes.

The RMA 1991 and the concept of sustainable management is considered mostly by regulatory authorities and used by these authorities to justify the particular traffic management option that they favour. The definition of sustainable management in the RMA 1991 S.5(2) facilitates this use of the legislation because the relative importance of different adverse environmental effects is not stipulated in the Act. Therefore TNZ and the CCC and the CRC have put most emphasis on the adverse environmental effects which support the particular traffic management option that they want to put in place for economic reasons. As Max Barber notes the northern arterial issue is not about environmental sustainability, it is an economic issue (pers. comm.); and as

Linda Constable so aptly described, sustainable management is a 'cling on' to that economic decision, not the reason behind it (pers. comm.). This statement implies that resource management legislation and changes to that legislation do not determine resource management practice.

***UNDERGROUND COAL MINING -
MOUNT DAVY*****5.1 INTRODUCTION:**

Mining, like road construction, has a long association with environmental degradation in New Zealand. This association is due to both the visibility of pollution and landscape degradation (particularly from open cast mining) and inadequate restoration of abandoned mine sites. Therefore incorporating sustainable management into resource management legislation could be expected to have a major impact on mining proposals. Chapter Five will analyse implementing sustainable management in Coalcorp's proposal for an underground coal mine at Mount Davy, Rewanui following a similar pattern to that used to analyse the Northern Arterial case study in Chapter Four. Firstly, the aspects of mining proposals covered by the RMA 1991 and the concept of sustainable management will be described. Coalcorp's proposal will then be outlined, why the proposal is a resource management issue in the local government planning process and the validity of studying the proposal for this thesis explained, and the groups involved in the issue identified. Each groups' role in and understanding of the resource management issue and the concept of sustainable management will then be analysed. A similar proposal to mine Mount Davy was put forward by West Coast Resources Ltd in the 1970s. This proposal will be used to illustrate continuities and changes in managing the resource issue before and after passing of the RMA 1991.

5.2 MINING AND THE RMA 1991:

Previous to resource management law reform mining was managed as a 'special' landuse and coal mining had its own statutes, the Coal Mines Act 1925 and 1979. Under Part IV of these acts mining in state coal reserve (the land status of Mount Davy) was excluded from the landuse provisions of the Town and Country Planning Act 1977 and the local government planning process. Not surprisingly, reform of New Zealand's mining legislation therefore involved many controversial issues including its status as a 'special' landuse. Mining state coal reserve (and all other crown minerals) is now covered by two pieces

of legislation: like any other resource use a mining proposal requires resource consents to use land and to take and discharge into water under the RMA 1991; and a minerals permit is required to prospect, explore or mine under the Crown Minerals Act (CMA) 1991. Any adverse environmental effect of the mining proposal must be avoided, remedied or mitigated (RMA 1991 S.5(2)(c)), but extraction of the mineral itself is excluded from the sustainability clause in the RMA 1991 S.5(2)(a). The rate of mineral extraction (sustainable or otherwise) is addressed in the Crown Minerals Programme formulated under the CMA 1991.

5.3 THE MOUNT DAVY PROPOSAL:

Mount Davy is located fourteen kilometres north-east of Greymouth in the Grey Coal Fields. The reserve contains an estimated 27.9 million tonnes of bituminous, moderate ash, low sulphur coal of which Coalcorp proposes to mine 13.2 million tonnes for export to Japan, India and China as a blending coal for coking (Coalcorp 1992 : p9).

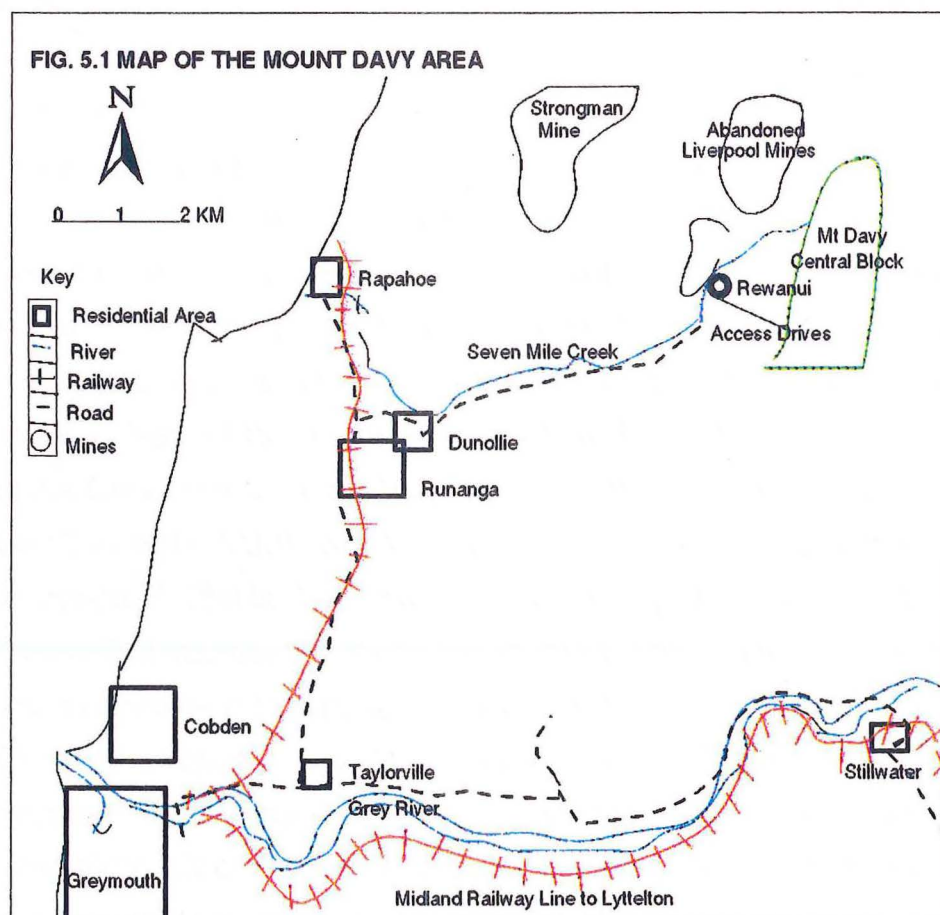


Figure 5.1 illustrates the location of the mine site. The coal seams will be accessed from Rewanui using two twelve hundred metre stone drives; the coal mined and extracted using continuous miner and hydraulic monitor techniques; washed, screened and sorted at Rewanui; and trucked to Stillwater from where it will be railed to Port Lyttelton for export. Full production is estimated to be five hundred thousand tonnes per annum for an estimated mine life of ten years (Coalcorp 1993: pp3-4).

Coalcorp's proposal is a resource management issue because it involves the use of land and water, and discharge into water which will affect the environment and other potential users of these resources, for example, public access to Rewanui and recreational use of Seven Mile Creek. Therefore resource consents are required from the West Coast Regional and Grey District Councils and applications for those consents are subject to the public planning process. Unlike the Northern Arterial issue, there appears to be little objection to Coalcorp's proposal from any sector of the Greymouth community to date. Hence, the proposal is a resource management issue at a 'technical' rather than at a 'political' level.

To date Coalcorp have obtained resource consents from the West Coast Regional Council (granted November 1992) to divert a two hundred and eighty metre section of Seven Mile Creek and to store fill from the stone drives in the dry riverbed and to discharge up to 1.5 million litres of water a day into the Creek from the mine. Coalcorp has an exploration permit allowing drilling on the Mount Davy plateau and has applied for a mining permit. Coalcorp's exploration permit was applied for before passing of the RMA 1991 so a landuse consent from the Grey District Council was not needed under the transitional provisions of the CMA 1991 (Martin Kennedy, pers. comm.). Coalcorp have undertaken an Environmental Effects Assessment of the mining proposal and have consulted with identified interest groups on the proposal and sought to address issues of concern raised by those groups at two meetings (November 1992 and February 1993). The proposal has been delayed while Coalcorp began mining in Strongman No. 2 Mine (Steve Riddell, Manager Resources, Aquisistions and Development, Coalcorporation of NZ Ltd: pers. comm.). A mining permit has now been applied for from the Ministry of Commerce and the appropriate

resource consent applications are expected to be lodged with the West Coast Regional and Grey District Councils by the end of 1994 (Steve Riddell, pers. comm.).

5.3.1 WHY STUDY MOUNT DAVY?

With resource consents to mine Mount Davy yet to be approved through the public planning process and what appears to be no community opposition to the proposal, one could question the worth of using this case study to illustrate the dynamics of local government planning in shaping the way in which sustainable management is implemented. The Mount Davy proposal is useful for this thesis research, however, for three reasons. Firstly, a proposal, an Environmental Effects Assessment, and community consultation have been undertaken and some resource consents granted, so the matters which are important to the developer, regulatory authorities and community interest groups can be identified. Secondly, it is interesting and important in studying the dynamics of public planning to establish reasons why some resource management issues are not controversial despite their impacts on the existing environment and community. Finally, because Mount Davy is state coal reserve West Coast Resources Ltd had to complete an Environmental Impact Report on their 1970s proposal (as required under Environmental Protection and Enhancement Procedures (EPEP) 1973). This document gives an indication of similarities and differences in the way in which environmental effects are assessed under the RMA 1991 compared with under EPEP.

5.4 KEY GROUPS INVOLVED IN THE MOUNT DAVY PROPOSAL:

Although Coalcorp's proposal has not met with any significant opposition to date, some community interest groups and environmental representatives raised issues of concern in consultation over the proposal. The key groups involved in the Mount Davy proposal are: the developer - Coal Corporation of New Zealand Ltd; the regulatory authorities - the West Coast Regional Council and the Grey District Council; community interest groups - the Rewanui Preservation Society and the West Coast Alpine Club; environmental representatives - the Department of Conservation (DOC-West Coast Conservancy) and the Royal Forest and Bird Protection Society of New Zealand Incorporated (RFBPS - West Coast branch); and Tangata Whenua -

specifically Te Runaka O Katiwaewae. Both regional and district councillors have not become involved in the Mount Davy issue (beyond granting resource consents) because it is not an issue of concern to the community. Information from interviews with Greymouth Mayor His Worship Ron Hibbs and Councillor Norm Walsh have been included to illustrate the views of Grey District Councillors and their constituents with respect to the proposal and sustainable management.

5.4.1 THE DEVELOPER - COALCORP:

Coalcorp has proposed to mine Mount Davy coal as a business venture so mining has to be both geologically and technically feasible and economically viable given estimated market prices for coal. To obtain the appropriate mining permit and resource consents, the proposal has to have acceptable environmental impacts in terms of the RMA 1991 and the CMA 1991. Coalcorp has a long-term mining operation on the West Coast so it is important to the Corporation that the proposal is also environmentally and socially acceptable to the local community. Community consultation is therefore a very important part of the public planning process for Coalcorp (Steve Riddell, pers. comm.). Steve Riddell stated that that Coalcorp are keen to improve the environmental image of mining (pers. comm.). The corporation are also probably quite keen to improve their popularity in the community after making redundant half the West Coast labour force employed by their predecessor State Coal Mines, after state sector restructuring in 1987 (Scott and Pawson 1992: p.248).

Coalcorp interprets its role in promoting sustainable management to be managing the adverse effects of the Mount Davy proposal on the surrounding physical environment and the local community for the time of the mining activity. Matters considered in the Environmental Effects Assessment of this proposal include impacts on flora and fauna at Rewanui and Mount Davy, and water quality in Seven Mile and Davy Creeks. The effects on historic and archaeological sites and recreational use of the area, and visual impacts are assessed. The effects of noise and dust from mining and transporting coal on residents in Dunollie, Runanga, Taylorville and Stillwater; and adverse and beneficial effects of the operation on the demand for employment and on social services in Greymouth are also included (Coalcorp, 1992, pp3-6).

Adverse environmental effects are considered to be those which result in irreversible changes to ecosystems or which harm rare and endemic features of an area (Steve Riddell, pers. comm.). Adverse environmental effects and thus sustainable management are site specific. A variety of methods can be used to manage environmental effects including adapting the mining operation to avoid or mitigate effects, and remedying effects through site rehabilitation or compensating for using a resource by protecting another (Ibid: pers. comm.). The adverse environmental effects of the Mount Davy proposal will be managed by using equipment to reduce dust and noise from mining and transporting coal, high base water quality standards to mitigate effects from discharging mine water into Seven Mile Creek, and high standards of site rehabilitation to avoid the fill area collapsing and the settling ponds leaching (Coalcorp 1993: p5). Enhancement of already degraded sites is also part of sustainable management so Coalcorp will use the same discharge standards as used in the much less polluted Waitahu River for Seven Mile Creek (Ibid: p.5).

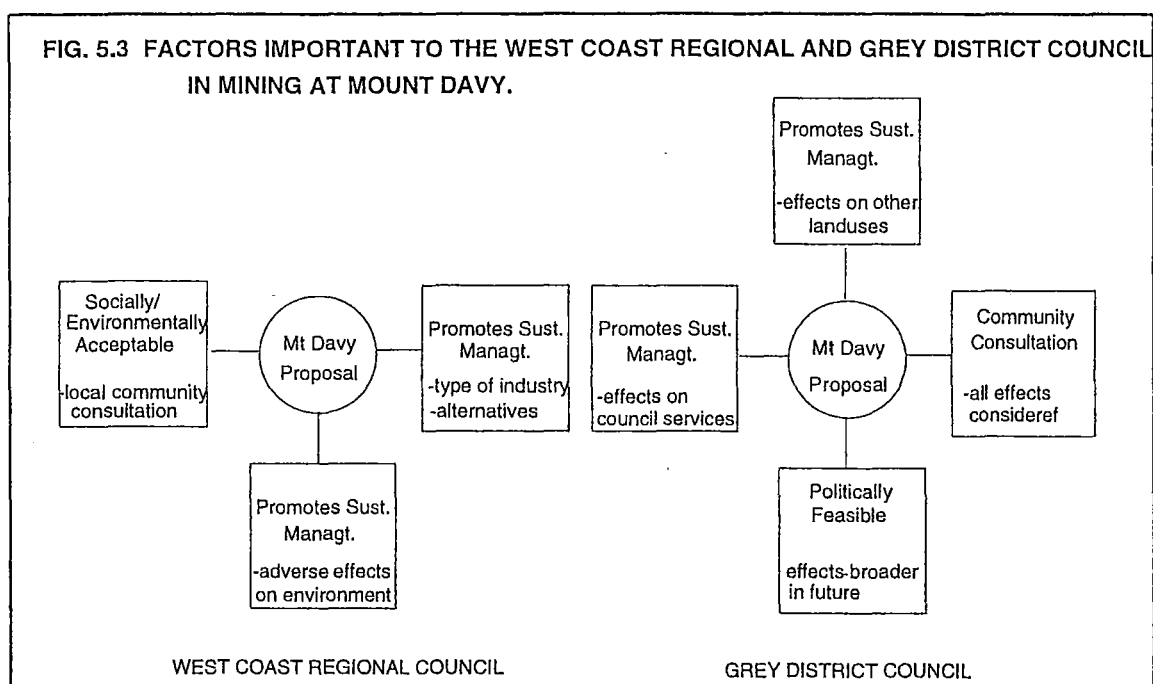
Coalcorp believe that it is the role of regulatory authorities, not developers, to reconcile specific proposals with the requirements of resource management legislation and policies (Steve Riddell, pers. comm.), but Coalcorp have made a submission on the proposed West Coast Regional Policy Statement - the statutory document for promoting sustainable management of natural and physical resources in the region. This submission requested that areas of coal mining potential on the West Coast be recognised in Regional and District Plans so that the effects of other proposed resource uses on the ability to mine in these areas can be assessed as an adverse environmental effect. The submission also suggested that any policy to reduce carbon dioxide emissions consider the adverse effects on society's need and demand for energy if the conditions for extracting or using fossil fuels are altered (Coalcorp, 1994 unpublished).

5.4.2 REGULATORY AUTHORITIES -

THE WEST COAST REGIONAL COUNCIL AND THE GREY DISTRICT COUNCIL:

The West Coast Regional Council and the Grey District Council are responsible for ensuring that any resource use or development promotes sustainable

management. Therefore, as depicted in Figure 5.2 promoting sustainable management is an important consideration for both councils in the Mount Davy proposal. Councils serve and councillors are politically responsible to their constituent communities so a resource management proposal also has to be acceptable to the local community. Community consultation is therefore an important factor for both councils because consultation is a statutory requirement for promoting sustainable management (RMA 1991 First Schedule S.1 and Fourth Schedule S.3, respectively) and is necessary to ensure that proposals are acceptable to community interest groups.



Specific responsibilities for regional and territorial authorities in promoting sustainable management are set out in the RMA 1991 S.30 and S.31. In accordance with S.30, the West Coast Regional Council is responsible for the adverse effects of mining on water quality and aquatic life in Seven Mile and Davy Creeks; on slope stability at Rewanui - for soil conservation and as a natural hazard; and possible leaching from the mine and settling ponds - a hazardous substance (West Coast Regional Council 1992: 63/92). The Council is satisfied with Coalcorp's water discharge standards, engineering works to mitigate slope failure at Rewanui, and construction of the settling ponds to avoid leachate (Dave Coll: pers. comm.). The type of resource use proposed and the availability of alternative employment are also important considerations

in assessing the Mount Davy (or any) proposal and mining is considered to be an appropriate resource use in the Grey Coal Fields (West Coast Regional Council 1994: p.14).

Under the RMA 1991 S.31 the Grey District Council has responsibility for the effects of the proposal on other landuses including noise and dust impacts on local residents; and impacts on flora and fauna, historic sites and visual effects from building the access road and facilities at Rewanui (Martin Kennedy, Grey District Council: pers. comm.). The predominant use of the Seven Mile Valley for mining and Rewanui's location five kilometres from the nearest residential town of Dunollie mean that the Council does not have any concerns about the effects of the mine operation on other landuses and residents in the area (Ibid: pers. comm.). The council is also concerned about the adverse effects of the proposal on services and facilities it provides such as sewerage and, particularly in this proposal, the effects of trucking coal to Stillwater on the wear and tear of local roads as both a physical resource under the RMA 1991 and a district council service under the Local Government Act 1974; and on communities en route (Martin Kennedy: pers. comm.).

Like Coalcorp, both councils assess adverse environmental effects on the surrounding physical environment and on local communities. Effects caused by mining and on going effects caused by leaching or erosion after the mine site has been rehabilitated are a concern (Wayne Harrison Planning Manager, West Coast Regional Council: pers. comm, Grey District Council unpublished: S.6(a)). Both councils agree that the adverse effects of a proposal and therefore promoting sustainable management are usually site specific. Modification and serious pollution of the Seven Mile Valley means that more adverse effects are tolerated here than in a pristine site. Only permanent effects are important - temporary adverse effects such as dumping fill on sites which will be restored are not a concern; and irreversible changes to the environment are acceptable provided that the productive capacity of the environment is retained (Martin Kennedy: pers. comm.). For example, the Grey District Council is not concerned if landuses are altered from forest to grassland provided that the land can still be used productively (Martin Kennedy, Ron Hibbs: pers. comm.). Both councils agree that sustainable management should

include enhancing degraded environments but that it is unreasonable to expect developers to "clean up someone else's mess" (Wayne Harrison, Martin Kennedy: pers. comm.). Similarly Martin Kennedy believes that sustainable management as a concept has the potential to address much broader adverse environmental effects than those on the immediate surrounding physical environment and communities. Such effects could include downstream environmental effects of using resources, and the energy efficiency of resource management proposals, but these are considerations for future resource management because planners do not have the skills to assess these indirect effects yet and developers are only just beginning to accept responsibility for direct, tangible effects on the environment let alone indirect, more speculative effects (Martin Kennedy: pers. comm.).

The main distinction between the way in which the two councils manage adverse environmental effects under the RMA 1991 is that the Grey District Council requires effects to be avoided, remedied or mitigated as stipulated in the Act S.5(2)(c) (Grey District Council 1994: p.2) , whereas the West Coast Regional Council requires adverse effects to be *minimised* (West Coast Regional Council 1994: p.14). Minimising environmental effects implies, in theory, that some adverse environmental effects are an acceptable part of resource use. Whether there is any difference between the two approaches in practice can only be accurately assessed by comparing the conditions which the two authorities would place on the same resource consent (which would be difficult to do because regional and district councils issue resource consents for different resource uses). The implications of minimising adverse environmental effects are in keeping with the Regional Council's consideration of the type of resource use and alternative employment opportunities in promoting sustainable management (West Coast Regional Council 1994: p.14).

In response to Coalcorp's submission on the proposed West Coast Regional Policy statement both the West Coast Regional Council and the Grey District Council agree that it is not the responsibility of regional and territorial authorities to identify areas of potential mining as this would equate with directing and controlling economic activity (Wayne Harrison, Martin Kennedy: pers. comm.). It is the role of the market to establish which is the most suitable resource use

for an area, particularly as mining depends on many other factors apart from the presence of minerals including prices and technology (Ibid: pers. comm.). Wayne Harrison noted that Coalcorp's proactive interest in certain areas influences the market by creating an expectation that mining should and will occur in these areas (pers. comm.).

MINISTRY OF COMMERCE:

The Ministry of Commerce is responsible for issuing the exploration and mining permits for the Mount Davy proposal within the provisions of the CMA 1991. Promoting sustainable management is not a requirement under the CMA 1991 but an environmental effects assessment and conditions for site rehabilitation must be included in the permit application. Environmental effects are assessed on the basis of established mining practices and are designed to ensure minimal disturbance to the environment and to protect any feature of special significance (Woods, 1994). Environmental effects assessments are also a compulsory part of any resource consent application under the RMA 1991 S.88 and with minerals excluded from S.5(2)(a) is the key aspect of promoting sustainable management in mining proposals. Therefore established mining practices in these areas will influence how environmental effects from mining are assessed and managed in promoting sustainable management.

The only specific clause in Coalcorp's exploration permit (no: 40 001) is that the site is restored using native vegetation due to the slope instability at Rewanui, and because Coalcorp's conditions for site rehabilitation in the mining proposal are considered to be acceptable for the area (Ministry of Commerce 1991: p.3). The Ministry of Commerce ensures that the proposal is geologically feasible, economically viable and that land access has been arranged and the appropriate resource consents obtained before issuing a permit (Woods 1994).

5.4.3 POLITICAL REPRESENTATIVES - GREY DISTRICT COUNCILLORS:

The Grey District Councillors share the view of the Grey District Council staff that the Mount Davy proposal is a resource development opportunity which is appropriate to the area and which has few adverse environmental effects. Because they are political representatives of the community the councillors are more concerned about possible effects on local residents such as dust and

noise than effects on the natural environment such as impacts on flora and fauna. The councillors interpret sustainable management as resource use which does not preclude other resource use in or enjoyment of an area (Ron Hibbs: pers. comm.). Therefore the Councillors are interested in the impacts of the proposal on tourism and recreational activities in the area; and that the site is restored to a 'useful' resource such as a recreation area (Ibid: pers. comm.).

Consultation is an important part of the proposal because it is an opportunity for the community to voice any concerns that they may have about the proposal and the feedback to councillors from local residents has reportedly been very supportive of the proposal (Norm Walsh: pers. comm.). The Councillors are not interested in submissions from and opinions of people from outside the district on the Mount Davy (or any other) proposal. It is the local people who are affected by the proposal so it is considered to be a local resource management issue (Ron Hibbs: pers. comm.). There is no concern about the impact of additional workers in the Dunollie-Runanga area on existing facilities and services. In fact the additional users are welcomed as a way to ensure the continuation of very underutilised services and facilities (Ibid: pers. comm.). Although the mine will only operate for ten years a short period of economic activity and utilisation of facilities is considered to be preferable to no use at all. Ron Hibbs noted that a major concern for local authorities with past mining proposals had been the establishment of mining towns which the local authority had to supply services to such as roads and water pipes, only to have the town virtually abandoned when mining ceased, such as Brunner and Blackball (pers. comm.). This was an unsustainable practice but has been ameliorated by the practice of miners living in nearby settlements and commuting to the mine (Ibid: pers. comm.).

5.4.4 COMMUNITY INTEREST GROUPS - THE REWANUI PRESERVATION SOCIETY AND THE WEST COAST ALPINE CLUB:

Minutes from Coalcorp's consultation with community interest groups suggested an overwhelming support for the proposal from a variety of groups including: The West Coast Tourism Council; New Zealand Rail Ltd; and other mining companies operating in the Seven Mile Valley - Moody Creek Mining Company Ltd and Tiller Mines Ltd (Coalcorp 1992a: p.1). Two community

interest groups which raised concerns over the proposal are the Rewanui Preservation Society and the West Coast Alpine Club.

Both community interest groups represent alternative resource users in the Rewanui and Mount Davy areas and their concerns were with retaining the ability to use these resources. The Rewanui Preservation Society was founded in 1986 by a small group of local people wanting to preserve the remnant facilities of this mining settlement as an example of West Coast mining heritage (Jennifer Williams, Rewanui Preservation Society: pers. comm.). In 1988 a massive landslide destroyed most of the Society's restoration work in the area. Therefore the two concerns for the Rewanui Preservation Society are that public access to Rewanui be maintained and that the remaining historic facilities of the area such as the tunnels on the old railway line to Rewanui, the Rewanui Railway Station and the old coal bins be preserved (Coalcorp 1992: p.5, Jennifer Williams: pers. comm.).

The West Coast Alpine Club, an outdoor pursuits club, uses the Rewanui area to get access into Mount Davy. Although not an overly popular tramping area, the club is concerned that public access to Mount Davy via Rewanui will be retained and, as outdoor recreationists, that the proposal does not have unacceptable environmental effects such as damaging nature flora and fauna (Coalcorp 1991: p.5, Annelies Bierings, West Coast Alpine Club: pers. comm.). Neither group had any thoughts about whether the proposal related to sustainable management and the RMA 1991, or any resource management policies. Yet without being aware of the concept of sustainable management both groups are promoting a form of sustainable management, in a similar way to the Ministry of Commerce, by identifying what they consider to be adverse environmental effects of the proposal and taking steps to ensure that those effects are avoided, remedied and mitigated.

Overall both groups were quite supportive of the project as another phase of appropriate development in the Seven Mile Valley and were satisfied with Coalcorp's response to their concerns (Jennifer Williams, Annelies Bierings: pers. comm.). Coalcorp agreed to make provision for another public walking track to Rewanui on the far side of Seven Mile Creek from the railway incline,

and to retain the historic facilities requested (Coalcorp 1992: p.5).

5.4.5 ENVIRONMENTAL GROUPS -

DEPARTMENT OF CONSERVATION:

Several environmental organisations were approached by Coalcorp for comment on the Mount Davy proposal but only the DOC and the RFBPS have raised issues to date. In this case study the DOC is classified as an environmental organisation because issues were raised as a result of DOC's general conservation advocacy function. The department is not a regulatory authority from whom planning consent is required to mine Mount Davy.

The DOC is interested in the possible effects of the proposal on rare species and natural and historic resources. Although the DOC assess adverse effects for the purpose of conservation (not sustainable management, under the Conservation Act 1987). DOC considers sustainable management and conservation, as defined in the Conservation Act 1987, to be similar concepts and the matters outlined in S.6 and S.7 of the RMA 1991 to cover conservation issues (DOC 1994: p.2). Whether for conservation or sustainable management purposes the DOC, like all other groups involved in this proposal, is considering the adverse effects of the proposal on the environment.

Possible effects of concern to the DOC in the Mount Davy proposal are: impacts on flora and fauna especially the great brown kiwi or roa and a rare land snail *Poweliphanta geggii* inhabiting the area (Rozen undated: p.1); land subsidence and slope instability (Davis 1992: p.1); effects on the aquatic environment from discharge and leaching of mine water and on historic resources especially the Rewanui Railway Station; and visual impacts and restoration of the site (Nicholls 1992: p.3). Further action by DOC will depend on how well the Environmental Effect Assessment addresses these concerns. DOC believes that both on site and 'downstream' effects of the mining operation on roads and rivers must be assessed along with continuing effects after mining has ceased. Ideally these effects should be assessed relative to a pristine rather than a degraded site because all environments have a capacity to regenerate (Gavin Smith: pers. comm.). Like both councils, the DOC realises, however, that it is very difficult to get developers to take responsibility

for 'cleaning up someone else's mess' on a degraded site (Ibid: pers. comm.).

ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND INC:

RFBPS is the largest and most active non-government environmental organisation on the West Coast and the only one to raise concerns about the Mount Davy proposal. RFBPS have their own policy with respect to mining and the RMA 1991 (and other legislation) is used as statutory support for these policies where appropriate.

The most important clauses of RFBPS's mining policy with respect to Mount Davy are: managing the immediate and 'downstream' effects of extracting coal on the biological, scientific, cultural and aesthetic values of the area (RFBPS 1988: S.14); improving the quality of land, air and water degraded from mining (Ibid: S.2); and conserving non renewable resources (which are excluded from sustainable management under the RMA 1991, Ibid: p.4).

The issues which concern the RFBPS in the Mount Davy proposal are, firstly, discharging mine water into Seven Mile Creek; and noise, dust and road wear from trucking coal to Stillwater (Gilbertson 1992). Broader or 'downstream' effects of concern include: the energy efficiency of using road rather than rail to transport coal to Stillwater and of using one fossil fuel to extract another; the impact of additional workers in the area on the physical environment, for example, increased numbers of recreationists and car drivers; and the environmental effects of promoting extractive industries on the West Coast (Bill Gilbertson: pers. comm.). When mining finishes at Mount Davy there will be a demand for more work and the next mine may be in a much less desirable area such as Pike River in Paparoa National Park (Ibid: pers. comm.). RFBPS believe that these broader effects need to be considered as part of sustainable management and are looking for an opportunity to test this idea with the Planning Tribunal (Ibid: pers. comm.).

RFBPS believe that the whole of the natural environment should be a Matter of National Importance under the RMA 1991 S.6 and that all degraded environments should be enhanced as stipulated in the RMA 1991 S.7(f) as part

of promoting sustainable management (Bill Gilbertson: pers. comm.). Therefore sustainable management is not relative to the state of existing degradation of a site but the natural or physical resource being used is important. For example, coal mining is less objectionable than gold mining because coal is an energy need for society whereas gold is a luxury item (Ibid: pers. comm.).

In 1974 RFBPS objected to West Coast Resources Ltd's proposal because it involved exporting New Zealand's energy resources overseas. This aspect of Coalcorp's proposal is not a concern to RFBPS now because New Zealand is seen to be part of an economically and environmentally interdependent global system. (Bill Gilbertson: pers. comm.). Ideally, RFBPS would be concerned about the environmental policies and emission standards of the coal importing nation but realise that this concern needs to be addressed at an international level (Ibid: pers. comm.).

5.4.6 TANGATA WHENUA:

Consultation with Tangata Whenua is a necessary part of Environmental Effects Assessment for any resource use under the RMA 1991 (First Schedule S.3, Fourth Schedule S.1 and matters set out in S.6 and S.7, and the principles of S.8). Tangata Whenua is politically divided on the West Coast and Coalcorp elected to consult with individual iwi and runanga. Te Runaka O Katiwaewae have concerns with the Mount Davy proposal.

The concerns of Te Runaka O Katiwaewae are centred around the effects of the proposal on specific areas of cultural significance: Seven Mile Creek which the runaka would like enhanced to the state where mahinga kai can be taken; and any sites of waahi tapu or commercial interest which building facilities at Rewanui and the access road may affect. Unlike sustainable management as interpreted by the Ministry for the Environment (1991: p.1) the significance of these effects are traded against socio-economic benefits, particularly employment opportunities for unskilled Maori (Jim Russell: pers. comm.).

Although not directly related to the Mount Davy proposal, interviews with Jim Russell (Te Runaka O Katiwaewae) and Iri Sinclair (West Coast Regional Council) raised two interesting issues with respect to sustainable management

and providing for the cultural well-being of Tangata Whenua. Firstly, two important resources for Te Poutini Ngai Tahu are excluded from the provisions for promoting sustainable management under the RMA 1991: whitebait (managed under the Conservation Act 1987); and greenstone which as a mineral is excluded from the sustainability clause in S.5(2)(a). Secondly, the RMA 1991 and the concept of sustainable management controls the *management* but not the *ownership* of resources. The two concepts are not separated in the beliefs of some Tangata Whenua (Iri Sinclair: pers. comm.). Iri Sinclair raised these two points to illustrate that promoting the sustainable management of natural and physical resources is a pakeha concept which does not readily equate with the resource management values and practices of all Tangata Whenua.

5.5 SUMMARISING SUSTAINABLE MANAGEMENT:

GROUPS	Aware RMA	Effects - envt.	Effects - comm.	Broader effects.	On-going effects.	Site specific	Future Gens.	Resource used	Socio-ec matters.
Developer	Yes	Yes	Yes	No	No	Yes	No	No	No
West Coast R.C.	Yes	Yes	Yes	No	Considered Yes		No	No	Yes
Grey D.C.	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
Councillors	Yes	Yes	Most Impt.	No	No	Yes	Yes	No	No
DOC	Yes	Most Impt	Yes	Yes	Most Impt	No	Yes	No	No
RFBPS	Yes	Most Impt	Yes	Impt	Most Impt	No	Yes	Yes	No
Alpine Club	No	Yes	Yes	No	No	Yes			
Rewanui Pres. Soc.	No	Yes	No	No	No	Most Impt			
Tangata Whenua	Yes	Yes	Yes on iwi	No	No	Most Impt			

FIG. 5.3 SUMMARISING SUSTAINABLE MANAGEMENT.

Figure 5.3 summarises the understanding of sustainable management of the different groups involved in the Mount Davy mining proposal. Promoting sustainable management as defined in the RMA 1991 is a concern only for the developer, Coalcorp and for the the West Coast Regional and Grey District Councils, all three of whom have obligations to promote sustainable

management under the RMA 1991. Environmental interest groups have an understanding of sustainable management but have their own environmental protection and conservation policies to which the RMA 1991 is applied where appropriate. Community interest groups were not aware of sustainable management or the RMA 1991, yet all groups involved in the issue are promoting forms of sustainable management because they were all seeking to avoid, remedy or mitigate what is considered by them to be adverse environmental effects of the proposal.

All groups agree that adverse environmental effects on the surrounding physical environment and communities had to be managed for the life of the mine activity, and these conditions are also used by the Ministry of Commerce in issuing mining permits. This agreement indicates that promoting sustainable management by managing adverse environmental effects is based on accepted resource management practices. Sustainable management gets more ambiguous as the broader environmental effects which are not part of established practices have to be considered. For example, in looking at ongoing and indirect effects of the Mount Davy proposal, councils and the DOC were concerned with possible ongoing effects from leaching on the mine site, but the RFBPS was the only group who interpreted sustainable management to include consideration of the broader effects of encouraging mining in general on the environment.

All groups agreed that sustainable management involves some form of environmental enhancement, and Coalcorp are prepared to use higher base water quality levels than those in Seven Mile Creek to regulate their mine water discharge. Neither environmental group believe that the already degraded nature of the Seven Mile Valley should influence the degree of adverse environmental effects allowed, but all groups did agree that sustainable management is site specific in that adverse environmental effects are specific to particular environments. Both councils recognise that sustainable management has to be socially acceptable and Coalcorp are also keen that their proposals are acceptable to the local community. Both environmental groups believe that sustainable management should be based on environmental effects which are not compromised by social interests.

5.6 FACTOR ANALYSIS:

The matters which are important to each group in mining at Mount Davy and their general support for Coalcorp's proposal are the result of a combination of structure-culture factors: the functions, policies and beliefs of the group; situational factors: the characteristics of the proposal; and external factors, which are not specific to either the proposal or the groups involved but which influence the resource management issue. Both situational and structure-culture factors have been important in determining the success of the Mount Davy proposal to date but structure-culture factors will be analysed first because it is the functions and ideas of the groups which determine how important situational and external factors are in group understandings of the resource management issue.

5.6.1 STRUCTURE-CULTURE FACTORS:

All groups involved on the Mount Davy proposal were concerned about possible adverse effects of the proposed mining operation on the physical environment and other resource users in the area. No group was opposed to the practice of mining per se. This factor is important in ensuring the success of the proposal because the concerns of all groups can be addressed while still allowing mining to go ahead.

The second structure-culture factor which has been important in ensuring the success of the proposal is a common understanding between Coalcorp, both councils, the DOC and the RFBPS that it is the responsibility of the developer to avoid, remedy and mitigate (or minimise in the case of the West Coast Regional Council) the adverse effects of the mining operation on the surrounding environment and communities. Consequently there have been no disputes about the type or extent of effects which Coalcorp are responsible for.

The West Coast Regional Council has adopted a very socio-economic approach to promoting sustainable management which suggests that the Council will support most resource development irrespective of adverse environmental effects. The West Coast Regional Council's interpretation of sustainable management in the proposed West Coast Regional Policy Statement emphasises: "...enabling people and communities to provide for

their economic, social and cultural well-being...." as well as the resource sustainability and environmental protection clauses of sustainable management (S.5(2)(a) to (c)). The document notes that the relative importance given to either part will depend on factors such as the availability of alternative employment, the sustainability of the economic activity and the degradation of the environment (West Coast Regional Council 1994: p.14).

Council staff claim that this understanding of sustainable management is influenced by the Councillors and that in issuing resource consents the staff establish ecological parameters or 'bottom lines' which cannot be compromised (Dave Coll: pers. comm.). These ecological parameters do not appear to be very strict, however. Coalcorp's self-imposed resource consent conditions were stricter than those required by the Regional Council (Dave Coll 1992: p.8). Dave Coll conceded that the Regional council approaches resource consent applications from the perspective that they shall be granted unless conservation groups can convince the Council otherwise rather than not issuing resource consents unless the developer can prove to the Council that all adverse environmental effects will be managed (pers. comm.).

This approach may be influenced by the functions of the authority as a regional council, and consequently the need to be seen to be doing something on the West Coast. The West Coast Regional Council and its predecessors have had a traditional role in promoting the development of West Coast resources for West Coasters, as illustrated in the objectives of the West Coast Regional Planning Scheme, and reportedly some councillors are finding it difficult to accept that the Regional Council no longer has this function under the RMA 1991 (Wayne Harrison: pers. comm.), particularly as many of the Council's Most resource management functions are undertaken by the DOC with over eighty per cent of the land area under some form of protected status (Scott and Pawson 1992: p.248).

Therefore the role and functions that groups consider themselves as having in the community, their sense of 'place,' is important in determining how they perceive the Mount Davy proposal. For example, Coalcorp is committed to running a long-term economically productive business on the West Coast (Kay

1992), and part of that aim is a commitment to both protection of the natural environment and the welfare of local mining communities (Coalcorp undated: pp 13-14). Therefore Coalcorp have adopted a proactive approach to consulting with the local community and Tangata Whenua about mining proposals and to redressing adverse effects (Coalcorp 1991-92: p.12, Steve Riddell: pers. comm.). Evidence of these commitments in the Mount Davy proposal include testing for boron content in mine water discharge not required by the West Coast Regional Council to satisfy the concerns of DOC and RFBPS; and providing alternative public access to Mount Davy and the abandoned Liverpool mine sites (then via the Rewanui railway incline) as requested by the West Coast Alpine Club and the Rewanui Preservation Society.

The DOC, RFBPS and the West Coast Alpine Club have particular functions whether legislative or voluntary to conserve natural and historic resources and protect endangered species (Conservation Act 1987: S.6); to protect indigenous flora and fauna and their habitats (RFBPS 1993: p.1); and to protect public access to and use of recreation areas on the West Coast, respectively. Therefore all three groups are interested in any proposal or resource consent application and will oppose the proposal or application if conservation values, indigenous flora and fauna or areas of high recreational value are adversely effected (Gavin Smith, Bill Gilbertson, and Annelies Bierings: pers. comm.). If these values are not affected the DOC and RFBPS are still interested in suggesting ways to modify proposals to reduce environmental effects wherever possible (Gavin Smith, Bill Gilbertson: pers. comm.). Therefore situational factors, the location and nature of the proposal and who the developer is have determined the support of the proposal by these three groups. It is the location of Coalcorp's proposal in the Seven Mile Valley which has raised concerns for the Rewanui Preservation Society and Te Runaka O Katiweawae.

5.6.2 SITUATIONAL FACTORS:

The concern for all groups involved in Coalcorp's proposal to mine Mount Davy is the adverse effects of the proposal on areas or resources of particular value to those groups. Therefore two situational factors have been paramount in determining who has been involved in the issue and the general support of those groups for the proposal: the location of the mine site in the Seven Mile

Valley; and the developer being Coalcorp.

The location of Coalcorp's proposal at Rewanui has determined the way in which the proposal has been understood and accepted by groups involved in two ways. Firstly, the location of the coal seams and surrounding geography of the area determine the layout and methods of mining and therefore the type of adverse environmental effects which will result. For example, the Mount Davy coal seams are overlaid by more than seven hundred metres of rock and the mine is located five kilometres from the nearest residential settlement so adverse effects from land subsidence and noise disturbance, respectively, are not expected to occur. Similarly there are no threatened species or areas of special conservation value or great cultural significance to Tangata Whenua likely to be effected by mining.

Secondly, the Seven Mile Valley has been mined for over one hundred years. Consequently the area has been extensively modified by the installation and operation of the Dunollie-Rewanui railway line and coal treatment facilities at Rewanui, illustrated in Figure 5.5, and the creeks polluted by discharges and leaching from current and abandoned mines. Therefore the Seven Mile Valley is little used for other commercial and recreational activities and mining is accepted as an appropriate activity for the area by regulatory authorities, community groups and Tangata Whenua. Therefore the West Coast Regional and Grey District Councils were less concerned about the adverse environmental effects of Coalcorp's proposal than if the proposal had been located in a pristine site (Dave Coll, Martin Kennedy: pers. comm.). The DOC and the RFBPS are not concerned about whether a site is degraded or not because all environments have the capacity to regenerate when the causes of degradation cease, but Bill Gilbertson did note that Coalcorp's proposal was acceptable because it made use of already modified land areas rather than destroying native bush to locate facilities and build the access road (pers. comm.).

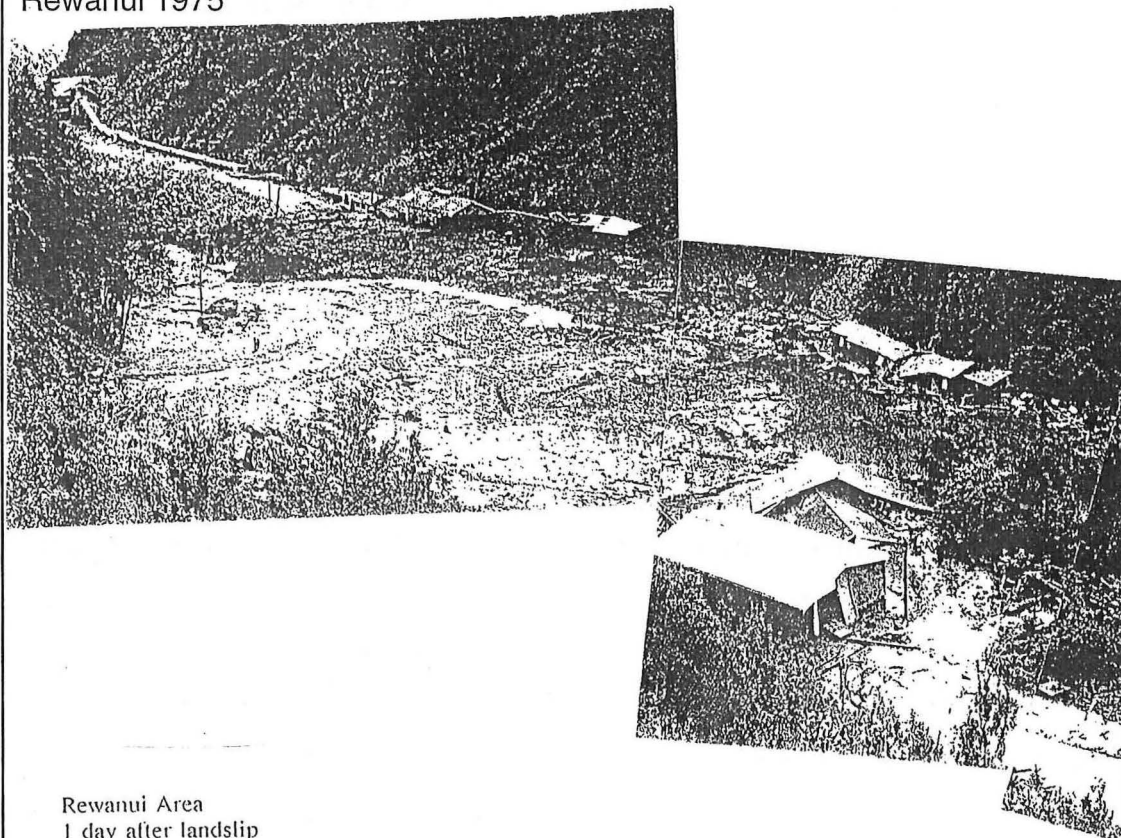
The Rewanui landslip was particularly important to the Rewanui Preservation Society's overall support for redeveloping Rewanui for mining. Jennifer Williams believes that had the landslip not destroyed most of the restoration work done by the Society at Rewanui, they may have objected to Coalcorp's proposal

because Rewanui was becoming a popular tourist heritage site (pers. comm.). This damage is illustrated in Figure 5.4.

FIGURE 5.4 REWANUI BEFORE AND AFTER 1988 LANDSLIP.



Rewanui 1975



Rewanui Area
1 day after landslide
of 13 September 1988

The second situational factor which has been important in ensuring overall support for coal mining at Mount Davy is that Coalcorp are the developers. All groups participating in this study commented on Coalcorp's effective consultation programme, and high standards of environmental protection and site rehabilitation. The West Coast Alpine Club and the Rewanui Preservation Society welcomed the opportunity to be consulted on the proposal because both groups felt that community interest groups tend to get bulldozed by developers and councils and were more than satisfied with the options put forward by Coalcorp to ensure public access to and protection of historic resources at Rewanui (Jennifer Williams, Annelies Bierings: pers. comm.). The DOC and the RFBPS also appreciated consultation with Coalcorp at a very early stage of the proposal so that the proposal could be formulate with consideration to the effects on flora, fauna and historic resources (Bill Gilbertson, Gavin Smith: pers. comm.).

The only group who was not satisfied with Coalcorp's consultation process was Te Runaka O Katiwaewae who, because they are interested in effects on specific sites of cultural significance, prefer to consider proposals at a more developed stage when the location of facilities and mine operation have been finalised (Jim Russell: pers. comm.). The runaka has a good relationship with Coalcorp so was not too concerned about this situation, however (Ibid: pers. comm.).

5.6.3 EXTERNAL FACTORS:

Four external factors can be identified which have influenced the way in which the Mount Davy proposal has been managed in the local government public planning process to date. These factors are: the inclusion of mining in local government resource management under the RMA 1991; the demand for employment on the West Coast; the effects of other mining proposals in the area; and the administration techniques of the West Coast Regional Council.

Firstly, the inclusion of mining in local government resource management under the RMA 1991 was welcomed by all groups. Both councils agreed that the adverse environmental effects could be better managed when conditions for mining and site rehabilitation were site specific, not set by a ministry in Wellington (Wayne Harrison, Martin Kennedy: pers. comm.). In this sense

promoting sustainable management is an external factor which has influenced resource management outcomes by establishing a potentially less controversial, site specific, 'effects-based' approach to evaluating mining proposals.

Community consultation and modification of mining proposals to avoid and mitigate adverse environmental effects is considered by all groups as a much more satisfactory way to manage mining than when the Ministry of Energy made a decision whether to approve mining independent of local conditions and based on the economic, geologic and environmental evidence submitted. This adversarial approach pitched conservation and mining interests against one another and did not address the effects of mining which were of concern (Steve Riddell, Ron Hibbs: pers. comm.).

Secondly, characteristics of 'place' - particularly the socio-economic environment on the West Coast has influenced the Mount Davy proposal. It has been suggested that Coalcorp's commitment to consultation with and making proposals acceptable to the local community may be influenced by a desire to improve relations with West Coasters after the massive redundancies of State Coal Mine workers when the corporation came into being in 1987. Similarly, the West Coast Regional Council's 'pro-development' approach to resource management was linked to the Council's need to be seen to be proactive in the community with so much resource administration under the control of the DOC, and the area hard hit by state sector restructuring in the late 1980s, with the loss of state subsidised industries, and state services.

The Grey District Council is also keen to promote economic growth in the area, but appears to do so through the provision of services and facilities to attract businesses to the area as part of its functions under the Local Government Act 1974. High unemployment and the need for economic opportunities on the West Coast were also reasons given by the West Coast Alpine Club, the Rewanui Preservation Society and Te Runaka O Katiwaewae for supporting Coalcorp's proposal. Although the DOC and the RFBPS indicated that the socio-economic characteristics of the West Coast were not considered by them in assessing resource management proposals, the general interpretation given

by all groups involved in the issue is that the Mount Davy proposal is 'good' because it provides badly needed economic opportunities without unacceptable environmental effects.

Thirdly, the effects of other mining activities in the Grey Coal Fields has influenced the matters which are important to the DOC, Coalcorp and the Grey District Council in the Mount Davy proposal. Many of the concerns raised by the DOC resulted from the effects of other mines in the area, for example, high boron content in mine water at Rapahoe (Nicholls 1992: p.3). Coalcorp have also used past experiences of mining to determine the way in which the Mount Davy proposal has been undertaken, particularly, community resentment towards Greymouth Coal Ltd's 1988 proposal to mine at Rapahoe which was undertaken with little community consultation (Steve Riddell: pers. comm.). Having been left responsible for supplying services to virtually abandoned mining towns when mining has ceased such as Brunner and Blackball, and a legacy of abandoned, degraded mine sites in the past, the Grey District Council are concerned that all mining proposals involve locating workers in existing residential areas, and restoring sites to a 'productive' use. These conditions are understood to promote sustainable management (Ron Hibbs, Martin Kennedy: pers. comm.).

The West Coast Regional Council's approach to issuing and monitoring resource consents has been identified by the RFBPS and the DOC as influencing their involvement in resource management issues, rather than the issue itself. The West Coast Regional Council's approach to managing resources by negotiating resource consent conditions between developers and interest groups is not considered by these groups to be promoting sustainable management because resource consent conditions are based on what the developer and interest groups want, not on the adverse environmental effects of the proposal (West Coast Regional Council 1994: p.19). Therefore both groups have adopted an 'environmental watchdog' role and take an interest in all resource consent applications and proposals on the West Coast (Gavin Smith, Bill Gilbertson: pers. comm.). Te Runaka O Katiwaewae is also critical of the West Coast Regional Council's 'pro-development' approach to resource management which they believe means that any opposition to a proposal has

to be taken to the Planning Tribunal to be duly considered (Jim Russell: pers. comm.). This dissatisfaction with the administration of the West Coast Regional Council means that consultation with Coalcorp and Coalcorp's commitment to environmental protection is vital in ensuring the support of these groups.

Structure-culture, situational and external factors have interacted to shape the way in which Coalcorp's proposal to mine at Mount Davy has been managed as a local government resource management issue under the RMA 1991. The factors of most significance have been the acceptance of all groups that it is the responsibility of Coalcorp to consult with the community and to manage the adverse environmental effects of the proposal in promoting sustainable management and the commitment of Coalcorp to do so; and the location of the mine which mean that the adverse environmental effects can be avoided, remedied and mitigated whilst still allowing mining to go ahead.

5.7 MOUNT DAVY PROPOSAL - CONTINUITIES AND CHANGES:

The legislation governing mining has changed dramatically with resource management law reform but the issues which are important in mining Mount Davy feature both continuities and changes between West Coast Resources Ltd's 1974 proposal and Coalcorp's current proposal to extract and export five hundred thousand tonnes of Mount Davy coal per annum. Promoting sustainable management is understood by the developer, regulatory authorities and environmental organisations involved in the Mount Davy proposal as managing, usually by a combination of avoiding, remedying and mitigating, adverse environmental effects of the proposal. Although previous to resource management law reform mining Mount Davy was excluded from the local government planning process environmental effects of the proposal were still assessed in three ways: a water right was still required from the local catchment board to take water from and discharge mine water into Seven Mile Creek; local authorities could make submissions to the Minister of Energy for conditions on landuse and site rehabilitation; and an Environmental Impact report was required under the government's EPEP 1973. What has changed is the way in which these effects are assessed. Greater emphasis is placed on environmental rather than social and economic impacts under the RMA 1991,

the type of effects considered is much broader including visual effects and impacts on historic sites; and a much higher standard of research and testing is required to validate assessments of environmental effects (West Coast Resources Ltd 1974, Commission for the Environment 1975). Adverse environmental effects are also better managed in the 1990s than the 1970s due to improvements in mining and site restoration techniques.

The second area of significant change in the Mount Davy proposal is the concerns of community interest and environmental groups. The main concern of the West Coast Alpine Club, the RFBPS and several other groups in 1974 was that West Coast Resources Ltd's proposal exported New Zealand's indigenous energy resources overseas. Undoubtedly the 1973 world oil crisis contributed to this objection at the time but it has not been a concern in Coalcorp's Mount Davy proposal. The reasons given for this change are high unemployment on the West Coast and recognition of an internationally interdependent economic and environmental system by the West Coast Alpine Club and the RFBPS, respectively.

5.8 CONCLUSION:

This chapter has illustrated how key interest groups understand Coalcorp's proposal to mine Mount Davy within the provisions of the RMA 1991 and the concept of sustainable management of natural and physical resources, and to explain why the proposal has not raised any objections among the local community or environmental interests. Promoting sustainable management in the Mount Davy proposal is accepted by all groups to involve managing adverse environmental effects on the surrounding natural environment and communities for the life of the mining activity. This acceptance contributes to the success of the proposal in the local government planning process but so do other factors. Of particular importance to the success of the proposal is, firstly, the location of the mine in an area already heavily modified by mining and with few other users likely to be affected by the proposal. The resulting adverse environmental effects can be managed while still allowing mining to go ahead. Secondly, Coalcorp's effort to consult with community interest groups about the proposal and commitment to redress issues raised means that many concerns have been resolved before resource consents are applied for. Thirdly,

Coalcorp's own commitment to high standards of environmental protection and site rehabilitation have satisfied the requirements of environmental groups as well as regulatory authorities.

The RMA 1991 and promoting sustainable management is important in shaping the proposal, mostly as an external factor resulting in community consultation and a site specific, 'effects-based' approach to assessing the proposal. Promoting sustainable management does have the potential to be a structure-culture factor determining the nature of the resource management proposal in that adverse effects have to be managed. For example, if trucking coal to Stillwater has unacceptable adverse environmental effects, an alternative transportation proposal will have to be made.

CHAPTER SIX

SUBDIVISION AND RESIDENTIAL DEVELOPMENT OF TRAVIS SWAMP AND KENNEDY'S BUSH SPUR

6.1 INTRODUCTION:

Subdivision of land which has 'special' values is not a new resource management issue. For example, 'Green Belts' have been used in town planning in New Zealand since the late 1940s to prevent urban sprawl onto agriculturally productive land (Barber 1991: p.3). Protecting wetlands from infilling and development is a recent resource management issue which has arisen as the ecological importance of wetlands has been recognized. The Christchurch City Council (CCC) is now in the unique position of proposing to protect Travis Swamp by allowing subdivision in a former 'Green Belt' area - Bottle Lake Forest. Chapter Six will study how promoting sustainable management is applied to this proposal using the same format as in the previous two case studies. The proposal and its relationship to the RMA 1991 and the local government public planning process, and its significance to this thesis will be outlined. The factors each group identify as important in their understanding of the issue will then be described and analysed in terms of structure-culture, situational and external factors. Protecting Travis Swamp by allowing subdivision of part of Bottle Lake Forest will be compared with promoting sustainable management in a recent (1994) proposal to subdivide in another 'Green Belt' area, Kennedy's Bush Spur. This comparison will establish whether allowing subdivision of Bottle Lake Forest is a unique measure to protect Travis Swamp or whether promoting sustainable management in the RMA 1991 S.5 has changed the role and importance of 'Green Belts' in urban planning.

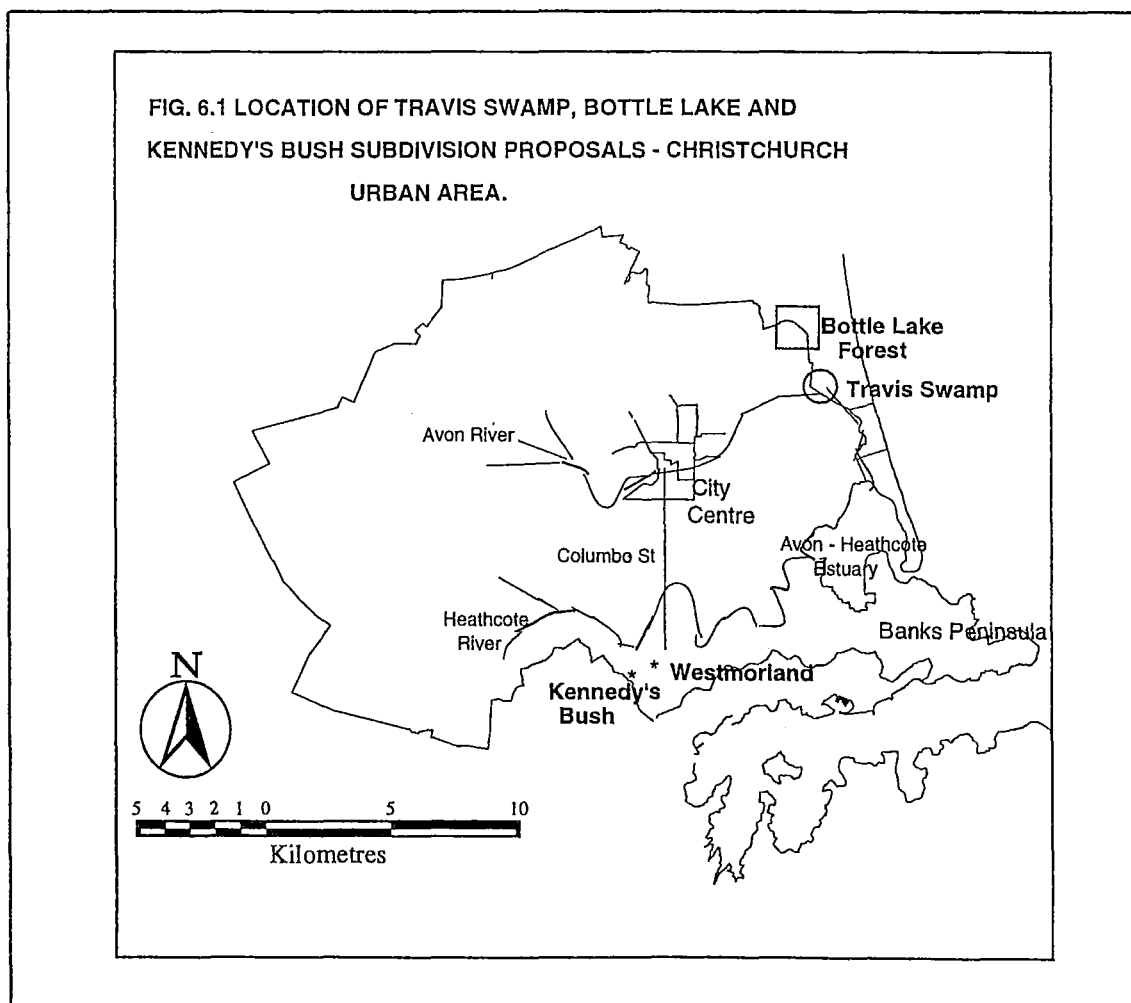
6.2 SUBDIVISION AND THE RMA 1991:

Subdivision or more correctly the resulting residential development is a land use managed within the provisions of the RMA 1991. Therefore any subdivision must promote the sustainable management of natural and physical resources (RMA 1991 S.5(1)). Subdivision and appropriate use of land is controlled

through zones which stipulate permitted land uses in areas in Christchurch under the operative city planning scheme. This scheme was formulated under the Town and Country Planning Act 1977 but remains valid provided that the provisions of the scheme are not inconsistent with the purpose, matters and principles set out in the RMA 1991 Part II (S.367). Both subdivision proposals require changes to the zoning of all three land areas involved - Travis Swamp, Bottle Lake Forest and Kennedy's Bush Spur, so these changes must not be inconsistent with promoting the sustainable management of natural and physical resources.

6.3 THE TRAVIS SWAMP PROPOSAL:

Travis Swamp is a one hundred and fifty hectare freshwater wetland located immediately west of Queen Elizabeth II Park in Christchurch as illustrated in Figure 6.1.



Seventy-five hectares of the land is currently owned by property developers

Travis Country Estates Ltd and is zoned 'Residential G1'. Therefore the land is being legally infilled, developed and sold as residential sections by the owners. Travis Swamp is also the best example of remnant freshwater wetland on the Canterbury Plains. Travis Swamp contains over sixty-three per cent of the indigenous flora and fauna of Canterbury Plains wetlands, including some rare species, and some of the last examples of unmodified Taitapu peat soils (CCC 1992a: Appendix II, pp1-4). Travis Swamp is also a traditional site of mahinga kai for Tangata Whenua (Ibid: p.4). Consequently there is demand for protection of Travis Swamp because of its ecological, aesthetic, recreational and cultural values from community, environmental and scientific groups and individuals, which is supported by CCC staff. In 1990 the CCC designated a total of 51.9 hectares of the most ecologically significant part of Travis Swamp as wetland reserve (CCC Policy Planning Manager 1992: p.1).

Since 1990, understanding of the hydrological systems and ecological values of wetlands has increased and it has been recognized that infilling the remaining Travis Swamp land would affect the hydrology of the wetland reserve and destroy an important wildlife habitat and potential recreation area. In 1992 the Travis Swamp Protection Group (later the Travis Wetland Trust) requested, through the Burwood-Pegasus Community Board, that the CCC protect all the remaining land at Travis Swamp. This request has been supported by CCC staff because of the wetland's ecological values and because wetlands are protected as a Matter of National Importance under the RMA 1991 S.6(a). The two legal options to protect Travis Swamp are: to designate the land for conservation under the RMA 1991 S. 171; or to change the zoning of Travis Swamp as is proposed in the draft City Plan (the statutory document for planning in Christchurch City under the RMA 1991). The cost of purchasing Travis Swamp by designation means that some councillors are reluctant to support this option. CCC staff do not want to rezone Travis Swamp without compensating the current landowners because Travis Country Estates Ltd would have good grounds for appealing the rezoning under S.85 of the Act - that the change makes incapable reasonable use of their interest in the land (Chris Freeman Parks Unit CCC: pers. comm.).

The CCC have recently purchased the remaining twenty-nine hectares of

Landcorp land at Travis Swamp (The Press: 8/12/94) and have proposed to exchange Travis Country Estates Ltd's seventy-five hectares for twenty-five hectares of CCC land at Bottle Lake and a cash settlement. The CCC and Travis Country Estates Ltd are currently negotiating compensation for Travis Country Estates Ltd. In the meantime Travis Country Estates Ltd can subdivide and develop one hundred and fifty sections in the south-west corner of Travis Swamp (CCC 1992: p.2).

6.3.1 TRAVIS SWAMP AS A RESOURCE MANAGEMENT ISSUE:

Travis Swamp is a resource management issue because the land is valued by the local community and environmental scientists for its ecological and aesthetic qualities and by Travis Country Estates Ltd for its potential as a residential subdivision. These two uses of the area are in conflict and create a resource management issue at a community and therefore at a 'political' level for councillors. Protection of Travis Swamp as a wetland is a Matter of National Importance within the provisions of the RMA 1991 S.6(a), (b), and (c) and a matter to have regard to in the management of natural and physical resources under S.7(d) and (f). Therefore infilling and development of Travis Swamp is a 'technical' resource management issue for CCC staff because although Travis Swamp is zoned for residential development under the operative city planning scheme, these particular provisions of the scheme are inconsistent with Part II of the RMA 1991. The CCC's proposed landswap creates a second 'political' resource management issue in the community because the landswap will involve removing forest and changing the semi-rural character of the existing residential settlement around Waitikiri Drive. These changes are objected to by local residents.

Protecting Travis Swamp is a resource management issue in the local government planning process for two reasons. It is in response to a request from public groups through their elected community board that the CCC are planning to protect Travis Swamp (CCC Policy Planning Manager 1992: p.16); and the zone changes necessary to protect Travis Swamp and to allow subdivision in Bottle Lake Forest (currently zoned 'rural') are subject to the public planning process under the RMA 1991 First Schedule S.5, S.6 and S.7.

6.3.2 WHY STUDY TRAVIS SWAMP:

The CCC proposal to protect Travis Swamp from infilling and subdivision is a valuable case study for this thesis for three reasons. Firstly, the CCC staff believe that they have a statutory obligation to protect Travis Swamp under the RMA 1991 but other factors are influencing the public planning process which means that this protection is not ensured. Secondly, the CCC's proposed landswap means allowing subdivision in another area valued for its aesthetic and recreational qualities which raises the question of whether a hierarchy of ecological importance is being established by the CCC in promoting sustainable management. Thirdly, Travis Swamp is a good example of the problem of promoting sustainable management when existing resource management practices, such as draining a wetland, are unsustainable.

6.4 GROUPS INVOLVED IN THE TRAVIS SWAMP ISSUE:

The original subdivision and development of Travis Swamp which has resulted in community action to protect the swamp was planned by Travis Country Estates Ltd in 1987, but it is the CCC acting on behalf of Christchurch citizens which is proposing to protect Travis Swamp through a land exchange. Therefore the CCC is considered to be both the developer and regulatory authority in this case study. The Canterbury Regional Council (CRC) also has an interest in the proposed landswap because Bottle Lake is in a 'Green Belt' area under the operative Canterbury Regional Planning Scheme. The CRC interprets the landswap as in accordance with the provisions of the Canterbury Regional Planning Scheme S.8(b) which allows for residential development in a 'Green Belt' if that use is of greater regional and national significance than preventing settlement (CUC 1985: p.25). Protecting Travis Swamp also supports the landscape objectives of the proposed Regional Policy Statement which seek to protect wetlands and indigenous bio-diversity (CRC 1993: pp87-93, Laurie McCallum CRC: pers. comm.).

The landswap proposal is a controversial and still fairly costly resource management option (estimated at between \$NZ 1-2 million, Chris Freeman, Councillor Dave Buist: pers. comm.). Therefore Christchurch City Councillors form a separate key interest group from CCC staff in this case study.

Protecting Travis Swamp has had considerable local media coverage (mostly in newspapers) and has sparked interest from a variety of different individuals and organisations. The three community interest groups identified as key groups in the issue are: the Travis Wetland Trust; Friends of Bottle Lake; and the current owners Travis Country Estates Ltd. Although a development company, Travis Country Estates Ltd are considered to be a community interest group in this case study in a similar sense to other property owners whose land is affected by resource management proposals such as St Albans residents affected by the northern arterial designation. The Selwyn Plantation Board are also affected by the landswap proposal because they lease the Bottle Lake land, and have expressed their opposition to the CCC. The terms of the lease of Bottle Lake land give the CCC the right to take back land for other purposes (Bill Studholm, Selwyn Plantation Board 1994). Therefore the Selwyn Plantation Board has not become a key group in this resource issue.

Protecting Travis Swamp is supported by local environmental groups but the proactivity of the Travis Wetland Trust means that these groups have played a supporting rather than a leading role in the campaign. The environmental group which has had considerable influence on the Travis Wetland Trust is the Royal Forest and Bird Protection Society of New Zealand Incorporated (RFBPS) which has several members in the Travis Wetland Trust (Jenny Lineham Secretary of Travis Wetland Trust: pers. comm.). Therefore the RFBPS's ideas on the relationship between protecting Travis Swamp and promoting sustainable management will be examined. Although Travis Swamp is a traditional site of mahinga kai and the CCC wanted Tangata Whenua to negotiate with Landcorp over conservation of their land in Travis Swamp as a Treaty partner, Tangata Whenua have supported but not become involved in the issue (Chris Freeman: pers. comm.).

6.4.1 THE DEVELOPER/REGULATORY AUTHORITY - THE CHRISTCHURCH CITY COUNCIL:

The CCC are committed to protecting Travis Swamp because of the swamp's ecological and hydrological values as a freshwater wetland; its potential recreational, tourism, aesthetic, and educational values as a wetland heritage park; and public support for the proposal (CCC 1992a: pp2-9, Hinman 1994;

P.1, Chris Freeman: pers. comm.).

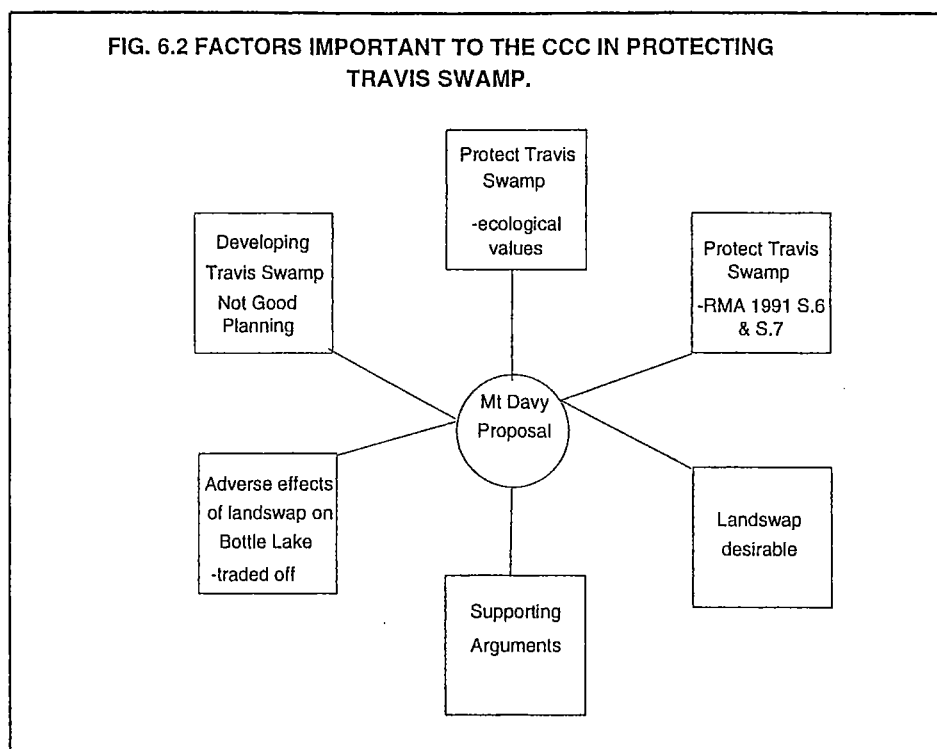


Figure 6.2 summarises the factors which are important to the CCC in protecting Travis Swamp. The RMA 1991 and promoting sustainable management influences the CCC's decision to protect Travis Swamp in two ways. Firstly, protection of wetlands, outstanding natural features, areas of significant indigenous flora and habitats of indigenous fauna, and water sites of cultural significance to Maori are all Matters of National Importance under S.6(a), (b), (c) and (e) of the RMA 1991 (CCC 1992a: pp9-10). These matters are guidelines for the sorts of things to be considered in promoting sustainable management (Ministry for the Environment 1991: p.1). Secondly, infilling Travis Swamp does not promote sustainable management because it does not maintain the life support capacity of the wetland ecosystem (S.5(2)(b)) and because it has adverse environmental effects which cannot be satisfactorily avoided, remedied or mitigated (S.5(2)(c)). The CCC designated part of Travis Swamp as a wetland reserve in 1989 before passing of the RMA 1991 and the current proposal to protect all of Travis Swamp is a response to a request from the then Travis Swamp Protection Group. The RMA 1991 and promoting sustainable management was not the initial reason for proposing to protect Travis Swamp, but lends statutory support to it.

CCC staff are committed to using any means necessary to protect Travis Swamp and if the land swap does not go ahead will still rezone Travis Swamp for 'conservation' in the draft City Plan (Chris Freeman: pers. comm.). The CCC would like the land swap to go ahead, however, because it makes the proposal more economically appealing to councillors. Christchurch City councillors make the final decision on any action the CCC takes and as will be discussed some councillors object to the cost of designating Travis Swamp to protect it (Ibid: pers. comm.). Therefore CCC staff give a host of additional reasons for protecting Travis Swamp to further convince councillors and public interest groups of the worth of the proposal. For example, the swamp's potential as an ecotourist attraction, as an alternative site to Riccarton Bush for the rejuvenation of kahikatea, and New Zealand's international commitments to agreements such as Agenda 21 and the International Bio-diversity Treaty 1992 both of which support the protection of wetlands (CCC 1992a: p.9). Similarly, subdivision of Bottle Lake is argued to be compatible with the rezoning of land adjacent to nearby Burwood Hospital to 'living' (residential in the draft City Plan (Hinman 1994: p.1). The CCC staff use similar methods to convince councillors that the landswap is economically viable, highlighting benefits such as: the savings in costs for drainage of and stormwater disposal in Travis Swamp; quicker development of sections at Bottle Lake which means that higher rates can be collected sooner; and that as a natural ecosystem the Travis Wetland Heritage Park will have low maintenance costs (Policy Planning Manager 1992: pp19-20).

The CCC staff are aware that subdividing Bottle Lake Forest will have adverse effects on: the rest of the forest from removing six thousand square metres of trees; the semi-rural residential environment enjoyed by the existing community; and on the direction of urban expansion in Christchurch (CCC 1992a: p.9, Chris Freeman: pers. comm.). Although only twenty-five hectares of Bottle Lake Forest out of seven hundred will be developed, the rezoning of this area is recognised to set a precedent for further subdivision proposals and loss of forest (Chris Freeman: pers. comm.). These effects are considered to be less adverse and more easily mitigated than the effects of infilling Travis Swamp. The public will still have access to Bottle Lake Forest for recreational use, and the loss of twenty-five hectares of pine plantation will be compensated by over

one hundred hectares of wetland (CCC 1992a: p.15).

The CCC do not believe that developing Travis Swamp is 'hazardous' with respect to land stability and flooding, but do argue that draining and infilling land to build houses is not 'good planning' (Chris Freeman: pers. comm.). Subdividing and developing Bottle Lake is argued to be more sustainable than developing Travis Swamp because it is 'putting the houses where the sand is' not 'taking the sand to the houses' (Policy Planning Manager 1992: p.16).

6.4.2 POLITICAL REPRESENTATIVES - THE CHRISTCHURCH CITY COUNCILLORS:

CCC staff have recommended that Travis Swamp be protected but it is the councillors, as political representatives of the community, who decide whether these recommendations will be carried out. Christchurch City Councillors agreed to designate 51.9 hectares of Travis Swamp as wetland reserve in 1990 and have recently agreed to purchase the twenty-nine hectares of remaining Landcorp holdings in Travis Swamp (The Christchurch Star, 8/12/94), but are divided over protecting the seventy-five hectares of land still owned by Travis Country Estates Ltd. Councillors are following their personal beliefs rather than political party policies in their support for or opposition to protecting all of Travis Swamp (Cr Dave Buist, Chair of Parks and Recreation Committee: pers. comm.). Four factors can be identified as influencing councillors' decisions. Firstly, some councillors are sceptical about the ecological importance of Travis Swamp particularly as the remaining unprotected area has been used for grazing cattle in the past (Cr Mike Stevens: pers. comm.). Secondly the cost of purchasing the remaining land and maintaining another park in the City is a concern for some councillors even if the proposed land exchange goes ahead (Cr Dave Buist: pers. comm.) Uncertainty and therefore speculation about how much the land exchange will cost the CCC in terms of compensation to Travis Country Estates Ltd and the Selwyn Plantation Board (for the loss of trees); and the loss of potential rates (there will be fewer sections in Bottle Lake than in Travis Swamp) has intensified these concerns.

The land swap itself is a third matter of concern to some councillors in two ways. Some councillors object to allowing subdivision in Bottle Lake because of

its recreational and aesthetic values which are just as important to some members of the public as Travis Swamp's wetland values are to others, and seventy-four hectares of the swamp is now protected for that purpose (Cr Mike Stevens: pers. comm.). Subdivision of Bottle Lake is also considered to be 'ad hoc' planning because residential development of Bottle Lake is not part of the operative City Scheme. Cr Stevens said that it was unfair that only two years ago a subdivision proposal for Bottle Lake was rejected by the CCC and now the council are proposing a subdivision themselves (pers. comm.).

As elected political representatives of the community, the fourth factor which councillors are considering is the wishes of the community. The CCC received a sixty-five hundred signature petition organised by the Travis Wetland Trust in support of protecting Travis Swamp, but they also received a twenty-five hundred signature petition organised by Friends of Bottle Lake opposing subdivision of that area. Submissions and petitions are recognised by both CCC staff and councillors to be a limited indication of public opinion because people often sign and make them, respectively, while having little understanding about the issue involved (Dave Buist, Mike Stevens, Eric Johnson CCC: pers. comm.). Councillors tend to use these petitions to support their own beliefs rather than as a reliable indication of public opinion. For example, Councillors who support the land swap argue that opposition from Friends of Bottle Lake is NIMBY (Not In My Backyard) politics because it would occur in relation to any proposed zone change of Bottle Lake (Cr Dave Buist: pers. comm.).

Christchurch City councillors tend not to think of protecting Travis Swamp in terms of the provisions of the RMA 1991. Neither councillor interviewed for this research, both of whom strongly support and oppose the proposal respectively, was aware that wetlands are protected under the RMA 1991 S.6(a). Yet in making the decision whether to accept the CCC staff recommendation to protect Travis Swamp and the factors which determine that decision, councillors are shaping the way in which sustainable management is implemented in local government resource management issues. In this case study, the adverse environmental effects of infilling Travis Swamp are being considered along with the adverse environmental effects of subdividing Bottle

Lake, the economic cost of the proposal and the wishes of community interest groups.

6.4.3 COMMUNITY INTEREST GROUPS -

TRAVIS COUNTRY ESTATES LTD:

Travis Country Estates Ltd declined to participate in the research for this case study because they are in litigation with the CCC over the proposed land swap at present. Information about Travis Country Estates Ltd's role in and understanding of the issue has been obtained from submissions, correspondence and minutes from meetings between CCC staff and Travis Country Estates Ltd, and from interviews with CCC staff.

Travis Country Estates Ltd is a development company which purchased residentially zoned land at Travis Swamp for the purpose of subdividing, developing and selling residential sections. Therefore the two most important factors for Travis Country Estates Ltd are: firstly, that they receive adequate financial compensation for the investment that they have made in planning the subdivision and the potential market value of the sections which they will lose; and secondly that they have the opportunity to subdivide and develop sections (CCC 1992: p.8). The current negotiations between the CCC and Travis Country Estates Ltd have been stalled by disagreements over the estimated cost of and therefore profit from developing sections at Travis Swamp relative to Bottle Lake (Chris Freeman: pers. comm.). The CCC staff and Parks and Recreation Committee are confident that Travis Country Estates Ltd will accept the CCC land swap proposal because they want to develop sections and reportedly two of the company directors will not settle for an outright purchase of Travis Swamp (Chris Freeman; Dave Buist: pers. comm.).

Travis Country Estates Ltd opposed the designation of twenty -two hectares of their land for wetland reserve in 1990 on the basis that the land did not have ecological, wildlife or historic values and was not necessary for the CCC's objective of establishing a wetland reserve (Travis Country Estates Ltd 1990). This submission was withdrawn after Travis Country Estates Ltd hired an independent consultant to assess the biological significance of the area under designation (CCC 1992: p.2).

There are no indications that Travis Country Estates Ltd are disputing the ecological significance of the remaining area of Travis Swamp or that they have considered the proposal in terms of promoting sustainable management. The CCC staff do believe that the company is prepared to appeal any rezoning of Travis Swamp under S.85 of the RMA 1991 (Chris Freeman: pers. comm.). Like other key groups in resource management issues Travis Country Estates Ltd have specific interests in the issue and a desired outcome and will use the appropriate clauses of legislation to secure that outcome. By seeking to avoid or remedy adverse effects on themselves from the CCC's proposal to protect Travis Swamp, Travis Country Estates Ltd are promoting a form of sustainable management.

TRAVIS WETLAND TRUST:

The Travis Wetland Protection Group (established as the Travis Wetland Trust in 1992) was formed in 1987 by a group of local residents and conservationists who opposed Travis Country Estates Ltd's proposal to develop Travis Swamp (Jenny Lineham Secretary Travis Wetland Trust: pers. comm.). Initially many of the members were unaware of the ecological significance of Travis Swamp as a wetland and opposed residential development of the area because it is prone to flooding and because many locals felt that Travis Swamp is a 'special' place (Ibid: pers. comm.).

As the Travis Wetland Trust have found out more about Travis Swamp and as the issue has caught the attention of environmental scientists and gained support from the CCC planners, the reasons for protecting the swamp have increased. The ecological, hydrological and cultural values of the swamp and its potential ecotourism, recreation, scientific, and regeneration values are all important to the Travis Wetland Trust in protecting Travis Swamp (Travis Wetland Trust 1994). It was the Trust who requested that the CCC protect all of the remaining swamp not only the 51.9 hectares designated for wetland reserve in 1990. The basis for this request is that the reserve does not provide an adequate habitat for much of the wildlife in Travis Swamp some of which, although not indigenous or rare, is important to the wetland ecosystem; and because draining the rest of Travis Swamp will affect the hydrology of the wetland system as has happened in Riccarton Bush (Flanagan 1988, Meurk not

dated: p.1, Crossland not dated: p.1).

The Travis Wetland Trust will not compromise over the need to protect Travis Wetland. The cost of acquiring the land is argued to be insignificant compared with the money which the CCC spends on creating artificial environments and attractions for the City such as enhancing the inner city (Jenny Lineham: pers. comm.). Therefore although the Travis Wetland Trust claim to sympathise with the protests of Friends of Bottle Lake about losing part of Bottle Lake Forest, the landswap is acceptable to the Travis Wetland Trust because protecting Travis Swamp is considered to be much more ecologically important than Bottle Lake Forest (Ibid: pers. comm.).

The Travis Wetland Trust is concerned that Travis Country Estates Ltd are allowed to continue to develop one hundred and fifty sections in Travis Swamp while negotiations for the land swap continue (Jenny Lineham: pers. comm.). The Travis Wetland Trust have looked at alternative options for protecting Travis Swamp including placing a heritage protection order over the area under S.188 of the RMA 1991, but the necessary requirements for the group to become a heritage protection authority under S.167 meant that the group have decided to co-operate with the CCC's proposal at this stage (Ibid: pers. comm.).

The Travis Wetland Trust are not only committed to protecting Travis Swamp but to enhancing the area as a wetland heritage park. The Trust undertakes weed control and restoration work in the swamp at present and have put together an Agenda 21 proposal for the rejuvenation and enhancement of the area as a wetland (Travis Wetland Trust 1994, Jenny Lineham: pers. comm.). Therefore although promoting sustainable management is not used by the Travis Wetland Trust to support protecting Travis Swamp, the provisions of Agenda 21 for retaining bio-diversity (Chapter 15) and protecting wetlands (Chapter 18) are used (Pegasus-Burwood Community Board 6/4/94). The Travis Wetland Trust were made aware of the provisions of Agenda 21 by Regional Councillor Diana Shand (Jenny Lineham: pers. comm.).

Like other key groups involved in this (or any) resource management issue, the Travis Wetland Trust use all the information and arguments they can to support

the particular resource management outcome which is perceived will mitigate what the group considers to be adverse effects from the resource issue or proposal. The RMA 1991 has been important not because of the clauses on promoting sustainable management but, like Travis Country Estates Ltd, for providing particular clauses which can be used to give legal effect to a desired outcome to the issue. The area of Travis Swamp being developed by Travis Country Estates Ltd, is illustrated in plates in Figure 6.3 along with the area at Bottle Lake which is proposed for exchange.

FRIENDS OF BOTTLE LAKE:

In a similar fashion to the Travis Wetland Trust, Friends of Bottle Lake is a local community interest group which formed to oppose a proposal to subdivide and develop an area which the group thinks has important aesthetic and recreational values. Residents of the existing settlement near Bottle Lake oppose the landswap proposal which will allow Travis Country Estates Ltd to subdivide and develop twenty-five hectares of Bottle Lake Forest. Society President Eric Osmers claims that Friends of Bottle Lake are not opposed to protecting Travis Swamp, only to the current CCC land swap proposal which means that that protection is at the expense of Bottle Lake Forest (pers. comm.).

Friends of Bottle Lake are concerned about the adverse effects of subdividing and developing Bottle Lake Forest on the recreational and commercial values of the forest; and on the existing residential area. The society emphasises that while Travis Swamp may have ecological and aesthetic values for some people Bottle Lake Forest also has recreational, aesthetic and ecological values which are just as important to other people and therefore the land exchange is swapping 'nature for nature' (Osmers 1994 (4/5)). The residents are also concerned that another subdivision will detract from the residential amenity of the area by increasing traffic on Waitikiri Drive, increasing crime in the neighbourhood and putting demand on community schools and facilities which are also located about three kilometres from the residential area (Osmers The Press: 5/8/94, Osmers: pers. comm.).

FIG. 6.3 TRAVIS SWAMP AND BOTTLE LAKE AREAS.



Travis Wetland looking south to the Port Hills. To many people who are unaware of the wetland's ecological value it is not reasonable to allow a subdivision in the much more aesthetically appealing entrance to Bottle Lake Forest pictured below.



Friends of Bottle Lake are also concerned that the land swap will set a precedent for further subdivision in the area and loss of the forest which is an important recreation area, source of employment and income for the City, and a buffer between the coastal landfill site and residential area at Bottle Lake (Osmers: pers. comm.). Even though 'Green Belts' are no longer part of regional planning under the RMA 1991, retention of the "Green Belt" around Bottle Lake is also argued as important by this community interest group to contain urban sprawl and to retain open spaces near the City (Ibid: pers. comm.).

Like the Travis Wetland Trust, Friends of Bottle Lake are uncompromising in their wish to protect the area from further subdivision. Therefore although the society claim that they are not opposed to protecting Travis Swamp only to the land swap, part of this action is disputing the ecological values which have been attributed to the remaining unprotected area of Travis Swamp. Friends of Bottle Lake object to what they consider to be a 'one sided' proposal by the Travis Wetland Trust and the CCC staff to protect Travis Swamp which over emphasises the ecological significance of Travis Swamp and underestimates the recreational value of and economic cost to the City of subdividing Bottle Lake. For Example, Eric Osmers has pointed out that the unmodified peat Taitapu soils are only twenty centimetres thick in the unprotected areas of Travis Swamp and that not all the flora and fauna thought to be in the samp has been sighted (Osmers The Press: 5/9/94, Eric Osmers: pers. comm.). The CCC claim that the city is gaining one hundred hectares of wetland for twenty-five hectares of pine plantation is also disputed because Friends of Bottle Lake point out that it is not a gain for the City but losses and gains for individual residential communities (Eric Osmers: pers. comm.).

Like the other community interest groups Friends of Bottle Lake have not argued their case in terms of the RMA 1991 and promoting sustainable management, and are not aware of the Act. Friends of Bottle Lake have a particular outcome from this issue which they do not want to happen because of its associated adverse environmental effects, and use any plausible reason available to support their viewpoint.

6.4.4 ENVIRONMENTAL GROUP - RFBPS:

The RFBPS has been lobbying for the protection of wetlands since the late 1970s. Protection of thirty hectares of what was then recognised to be the most ecologically significant areas of Travis Swamp was proposed in 1987 (Calder 1988, David Alexander RFBPS: pers. comm.). RFBPS support the Travis Wetland Trust's campaign to protect all of Travis Swamp and several of the Trust's members are also members of RFBPS including the Trust's president the late Mrs Anne Flanagan (Jenny Llineham: pers. comm.). Therefore the ideas of the RFBPS on protecting Travis Swamp and promoting sustainable management will be analysed because they have influenced the way in which the Travis Wetland Trust has developed its campaign.

As detailed in Chapter Four, the RFBPS's principle goal is to protect indigenous flora and fauna and their habitats (RFBPS 1993: p.1) and they have a national policy to protect wetlands as endangered habitats (RFBPS 1994: p.30). Therefore the RFBPS consider protecting Travis Swamp in terms of its policies on wetlands and indigenous flora and fauna. The insitu bio-diversity of Travis Swamp coupled with its hydrological functions in storing run-off from the Avon River and its location on the flyway for local birds means that the RFBPS North Canterbury Branch are adamantly opposed to any development of Travis Swamp which compromises these values (RFBPS 1994: p.30, David Alexander: pers. comm.).

The RMA 1991 is an important consideration for the RFBPS in any resource management issue because it is the legislation which controls the effects of the use of natural and physical resources on ecosystems and the environment but the RFBPS determine their role in any resource management issue on the basis of protecting indigenous flora and fauna (David Alexander: pers. comm.). Clauses of the RMA 1991 are used to give statutory support to RFBPS's position where appropriate. The RFBPS do not base their position on resource management issues in terms of whether the issue promotes sustainable management because sustainable management is interpreted to incorporate elements of both conservation and development and RFBPS focus only on conservation with respect to protecting indigenous flora and fauna (David Alexander: pers. comm.).

The second question must also be addressed as to how the RFBPS view the proposed landswap given that it involves both: the removal of twenty-five hectares of forest to allow for a subdivision; and that the subdivision will be located in a 'Green Belt' area. As with the CCC staff and the Travis Wetland Trust, the RFBPS argue that the ecological values of Travis Swamp are much more significant than loss of an exotic pine plantation, and that significance justifies development in a 'Green Belt' (David Alexander: pers. comm.).

6.5 SUMMARISING SUSTAINABLE MANAGEMENT:

FIG. 6.4 SUMMARISING SUSTAINABLE MANAGEMENT.

Groups	RMA & S.M.	Effects - phys. envt.	Effects - comm.	Indirect Effects	Temp/Per effects.	Site specific	Future Gens.	Cost effective
CCC	Yes	Most Impt.	Not So Impt.	Yes	Both	Yes	Yes	For Crs
Travis W.T.	RMA Yes	Most Impt.	No	No	Both	Yes	Yes	No
Councillors	Some	Some	Most Impt.	Some	Perm.	V. Impt.	Some	Most Impt.
Friends B.L.	No	Some effects	Most Impt.	No	Perm. Impt.	Most Impt.	No	Yes
Travis C.E. Ltd.	No Indication		Ec Effects on Co.			Most Impt.		
RFBPS	Yes	Most Impt.	Not Impt.	Yes	Both	Most Impt.	Yes	No

Figure 6.4 summarises how each group understands promoting sustainable management in relation to protecting Travis Swamp, and subdividing Bottle Lake in order to achieve that goal. As with the northern arterial and Mount Davy case studies, only the developer/regulatory authorities have considered the proposal in terms of promoting sustainable management as defined in the RMA 1991 S.5(2). because it is the developers who have to formulate and evaluate resource management proposals in terms of the RMA 1991 (S.32 and S.88) and it is the function of regional and territorial authorities to promote sustainable management of natural and physical resources (RMA 1991 S.30 and S.31). All other key groups are committed to securing particular outcomes from the

resource management issue which are not linked with the concept of promoting sustainable management. Yet all groups involved in the issue are promoting a *form* of sustainable management based on avoiding, remedying or mitigating what they consider to be the adverse effects of the current infilling of Travis Swamp, protecting Travis Swamp, or the proposed landswap.

The effects which are considered by the Travis Wetland Trust (and the RFBPS) and Friends of Bottle Lake in subdivision and development of both areas are similar to one another and to those effects considered by the CCC staff - the effects on the surrounding physical environment, the socio-cultural effects of the loss of areas of aesthetic and recreational value, and the cost-effectiveness of developing the area. What differs is the relative importance which is given to the different adverse effects. The CCC and the Travis Wetland Trust think that the adverse ecological effects on the wetland are most important, whereas Friends of Bottle Lake think that the effects on the recreational and aesthetic values of Bottle Lake are just as important as those on Travis Swamp, particularly as a large part of Travis Swamp is already protected.

The adverse effects considered are site specific for all groups involved. It is the effects of subdividing and developing in a particular area which are objected to not the practice of subdivision and residential development per se. The principle of allowing residential development in a 'Green Belt' is objected to by Friends of Bottle Lake but it is questionable as to whether the society would have formed and objected to residential development in another 'Green Belt' area. They have not made a submission on the proposal to subdivide and develop Kennedy's Bush Spur which will be discussed later in the chapter.

The landswap is argued to promote sustainable management by the Travis Wetland Trust, the RFBPS and the CCC staff in three ways. Firstly, the wetland is more ecologically significant than an exotic pine plantation so sustainable management is promoted by trading off adverse environmental effects based on a hierarchy of ecological significance. Secondly, Bottle Lake is argued to be a more suitable site for development than Travis Swamp because it does not require extensive infilling and drainage. Finally, the landswap is more socially acceptable than designating Travis Swamp because it is more cost-effective, it

protects Travis Swamp and Bottle Lake is an area which has been identified for possible future residential development in the draft Clty Plan (CCC 1992: p.83, Chris Freeman: pers. comm.).

6.6 FACTOR ANALYSIS:

The Travis Swamp resource management issue has resulted from changing values about the ecological importance of wetlands among groups in the community which clash with the existing and proposed use of Travis Swamp. These changing values about wetlands have been recognised in legislation. Therefore a combination of situational, structure-culture and external factors have given rise to the issue and influenced the way in which it can be resolved.

6.6.1 SITUATIONAL FACTORS:

None of the groups involved in the Travis Swamp issue are opposed to subdivision and residential development per se, only to those activities in certain areas which have non residential values. Therefore situational factors have determined the involvement of the Travis Wetland Trust, Friends of Bottle Lake and Travis Country Estates Ltd in the resource management issue and the RFBPS members have been particularly interested in protecting Travis Swamp because it is a local wetland (David Alexander: pers. comm.). The characteristics of Travis Swamp and Bottle Lake and their existing land status have shaped the resource management issue.

Protection of Travis Swamp is important because of: what is in the swamp - its existing ecological diversity including rare flora and fauna and soil structures; its rarity as a freshwater wetland on the Canterbury Plains; and because of its potential to regenerate as a wetland due to its size and location on the flyway for local birds (Crossland not dated: p.1). Travis Swamp's location within Christchurch's urban area enhances its aesthetic values as a wetland heritage park (CCC 1992a: p.10, Travis Wetland Trust 1994, Chris Freeman: pers. comm, Jenny Lineham: pers. comm.).

Travis Swamp was purchased by Travis Country Estates Ltd as land zoned 'Residential G.1' for the purpose of subdivision and urban development. The existing status of the land influences the issue in two ways. Firstly, the owners

are legally infilling and developing the swamp at present so an option to protect Travis Swamp has to be agreed upon fairly quickly. Secondly, the potential value of the land as residential sections limits the options available to the CCC to protect Travis Swamp because to designate the land will be expensive (RMA 1991 S. 171), and the type of interest which Travis Country Estates Ltd have in the land means that rezoning Travis Swamp would render the owners incapable of reasonable use of the land under S. 85 of the Act.

Similarly, the present use and status of land at Bottle Lake Forest makes the landswap proposal controversial. As part of a plantation the area has high aesthetic and recreational values. The area has also been part of a 'Green Belt' since 1961 after which no further subdivision in the area has been allowed (Eric Osmer: pers. comm.). Residents want to protect the semi-rural lifestyle which has resulted from the land's status.

That the CCC staff are proposing the landswap adds controversy to the issue because, as in the Northern Arterial case study, those groups adversely affected by the proposal feel that the CCC are biased in their consideration of the issue (Travis Country Estates Ltd 1990, Eric Osmer: pers. comm.). The resulting ill feelings seem to reduce the chances for successful consultation and negotiation between groups.

6.6.2 STRUCTURE-CULTURE FACTORS:

Situational factors have determined who the community interest groups are involved in the resource management issue but how they respond to that issue is a result of structure-culture factors - the functions, values and resources available to the groups. It was noted that the resource management issue has resulted from a change in values about the importance of wetlands among some community groups. It is those values which have shaped the resource management issue not only because they are inconsistent with the existing use of land at Travis Swamp, but because they are not values shared by all members of the community. The CCC staff, the Travis Wetland Trust and the RFBPS believe that wetlands should be protected at any cost, but Friends of Bottle Lake and some councillors do not share these views. The position of councillors in this issue depends on a combination of the relative importance

which they place on the advice of planning staff and scientists and their own personal understanding of environmental issues. For example, Councillor Mike Stevens is sceptical about the ecological values which are being assigned to the remaining unprotected areas of Travis Swamp because as a local resident he has seen Travis Swamp land used to make hay and to graze cattle in the past (pers. comm.). Conversely some councillors are reportedly prepared to protect Travis Swamp having never seen the site (Ibid: pers. comm.).

The functions of each group determine how they perceive the issue and therefore how it can be resolved. For example, Travis Country Estates Ltd's main goal is to subdivide and develop land so they are prepared to forgo developing Travis Swamp if another site and appropriate compensation are given. Friends of Bottle Lake are totally opposed to any subdivision in Bottle Lake because they want to retain their current 'semi-rural' living environment which means that protecting Travis Swamp using the proposed landswap will be controversial and possibly appealed to the Planning Tribunal (Eric Osmer: pers. comm.).

The different functions of groups involved in the issue also mean that the issue is understood at different spatial scales. For example, the CCC has the function of managing the City's resources and so takes a 'city-wide' view of the proposed landswap as a net gain for Christchurch of over one hundred hectares of recreational land. Friends of Bottle Lake, as a neighbourhood organisation, see the issue differently. They argue that protecting Travis Swamp does not benefit the whole City, it is providing a recreational area for one local community at the expense of another (Eric Osmer: pers. comm.). As noted in the northern access road issue, these neighbourhood arguments are dismissed by CCC staff and some Councillors as NIMBY politics, while protecting Travis Swamp is for the 'good' of the City (Chris Freeman, Dave Buist: pers. comm.). Councillors are somewhere between these two poles, being elected to represent their wards, but also having to make decisions for the City as a whole. Consequently these different spatial scales from which the issue is considered, help to make the issue controversial.

The resources available to groups are important in determining how influential

they are in the planning process. Most significantly, the CCC does not have the resources to purchase Travis Swamp by designation and so has to find an alternative option (Chris Freeman: pers. comm.) Like the northern arterial issue one of the major factors determining the outcome of this issue is cost and the availability of funds. The availability of resources also determines the influence of community interest groups. Eric Osmers complained about the 'one sidedness' of the landswap proposal which focussed on all the benefits of protecting Travis Swamp but ignored the costs of developing Bottle Lake (pers. comm.). This apparent one sidedness is a result of the support which the Travis Wetland Trust has got from CCC staff, scientists, local media and environmental groups because protecting wetlands is an important ecological issue at a time when ecological issues are a 'hot' academic and social topic worldwide. Friends of Bottle Lake are limited in their resources because although they have been in contact with Travis Country Estates Ltd and the Selwyn Plantation Board, these two groups have their own agreements with the CCC over the issue, and Friends of Bottle Lake have not sought support from other organisations (Eric Osmers: pers. comm.).

6.6.3. EXTERNAL FACTORS:

Three external factors have influenced the Travis Swamp issue. Firstly, scientific understanding of the functioning and ecological importance of wetlands has changed. The reason why Travis Swamp was zoned for residential development in 1971 and that the zoning was not objected to in the second review of the Waimari District Scheme in 1985 was because scientists and planners did not understand how important wetlands were (Chris Freeman, David Alexander, pers. comm.). Even in 1987 the RFBPS and the DOC only lobbied the CCC to protect two small areas of the most biologically significant part of the swamp (thirteen and fifteen hectares, and three and thirteen hectares, respectively, CCC 1992a: p.10).

Secondly, the RMA 1991 has influenced the Travis Swamp issue in two ways. As discussed, the RMA 1991 provides for the explicit protection of wetlands in S.6(a). Matters of National Importance in S.6 and the meaning given to sustainable management in S.5(2)(b) and (c), mean that the CCC staff believe that Travis Swamp must be protected if the CCC are to: "do any more than pay

'lip service' to the RMA 1991" (Chris Freeman: pers. comm.). In this situation promoting sustainable management has not determined the resource management proposal (this was done by the Travis Wetland trust' initiative in 1990) but it is recognised that protecting Travis Swamp has strong statutory support under the RMA 1991. Other clauses of the Act stipulate the ways in which Travis Swamp can be legally protected. The conditions for designating Travis Swamp under S.171 and rezoning Travis Swamp under S.85 of the Act, coupled with the current land status, make the proposed landswap the most attractive option for the CCC to protect Travis Swamp.

Thirdly, the local government planning process has been identified by the RFBPS and the Travis Wetland Trust as frustrating the protection of Travis Swamp. The RFBPS noted that it was the mechanisms of the local government planning process that rezoned Travis Swamp for residential development and once as the land had been sold as residential land to Travis Country Estates Ltd protecting Travis Swamp became much more difficult and expensive (David Alexander: pers. comm.). The Travis Wetland Trust identified the delays in protecting Travis Swamp through the local government planning process and the lack of public awareness of how the process works as 'frustrating'. Jenny Lineham pointed out that as local residents the founding members of the Trust were not aware that Travis Swamp could be developed until the required public notification was placed on the land by Travis Country Estates Ltd in 1987 (pers. comm.). By this stage the public had missed the opportunity to challenge the residential zoning of Travis Swamp in the 1985 review of the Waimari District Scheme (Ibid: pers. comm.). (Only features of Travis Country Estates Ltd's planned subdivision could be challenged in the local hearing in 1988 not the residential zoning of Travis Swamp, Local Government Act 1974: S.267).

The Travis Swamp resource management issue has resulted from changing values about the importance of wetlands among some community groups which conflict with the existing resource use of Travis Swamp. The resource management outcomes to resolve this conflict are limited by the resources available to the CCC, the concerns of some councillors, the commitment of the CCC staff to protecting all of Travis Swamp, and the legislative requirements of the RMA 1991. Consequently a number of situational and structure-culture

factors have given rise to the issue. Structure-culture and external factors determine the options to resolve the issue and the resulting location of the land proposed to be exchanged for Travis Swamp in Bottle Lake Forest, a situational factor, means that the proposed outcome is controversial.

6.7 CONTINUITIES AND CHANGES:

Residential development of Travis Swamp is both a long-standing resource management issue in its own right and part of a traditional issue in local government planning of protecting 'special' areas from urban development. Therefore the Travis Swamp proposal has elements of both continuity and change.

The initial rezoning of Travis Swamp from 'rural' to 'residential' in the Waimari District Scheme Review 1971 was opposed because of the proneness of the swamp to flooding and its peat soils which were thought to be unstable. The then Canterbury Regional Planning Authority appealed the zone change but the change was upheld by the Planning Tribunal (CCC Policy Planning Manager 1992: p.1). These concerns are still given as reasons why Travis Swamp should not be infilled and developed (Flanagan 1990) but accompanying these reasons is recognition of the values of the hydrological functions and peats soils of the swamp, and its ecological, cultural, recreational, aesthetic and many other values as a wetland. These changes are recent. In 1986 Waimari District Council planners argued that Travis Swamp had been extensively modified and was only a remnant area that was not worth preserving (Hinman 1991: p.3). In 1987, as discussed, the RFBPS and the DOC were lobbying for small areas of Travis Swamp to be preserved and in 1990 the CCC designated 51.9 hectares as wetland reserve. By 1993 the CCC staff had a vision of both protecting all of Travis Swamp and developing it as: "...the Hagley Park of the future (which) must receive the same foresight in its planning and preservation" (Freeman in The Press 8/12/93).

Protecting Travis Swamp is also another phase in the local government planning tradition of preventing residential development in areas with non residential values. This tradition developed in Christchurch with the use of 'Green Belts' to prevent urban sprawl onto agriculturally productive land

particularly in the post World War II housing boom (Barber 1991: p,3) but the non residential values of land have changed. Whereas 'Green Belts' were designed to protect rural land and swamps were considered to be 'wastelands,' the proposed landswap to protect Travis Swamp by allowing a subdivision in the 'Green Belt' area of Bottle Lake Forest suggests that swamps or wetlands now have higher ecological values than traditional 'Green Belt' areas.

The question which must now be addressed is whether this change is particular to the special circumstance that wetlands are more ecologically significant than pine plantations or does the shift to an 'effects-based' assessment of subdivision proposals under the RMA 1991 mean that subdivision and residential development can only be excluded from areas which have significant ecological values? Can residential development be excluded from certain areas simply because regulatory authorities and community interest groups do not want residential development in certain places? An analysis of a recent (1994) subdivision proposal in another 'Green Belt' area, Kennedy's Bush spur, will be undertaken to try and answer this question.

6.8 THE KENNEDY'S BUSH PROPOSAL:

The Kennedy's Bush subdivision proposal involves a request from property holders the van Asch Hoon Hay Family Trust for a change to the existing 'rural' zoning on twenty-three hectares of their property to allow for subdivision and development of a low density residential settlement adjacent to the existing houses on Kennedy's Bush Road. The location of Kennedy's Bush Spur is mapped in Figure 6.1 and the plates in Figure 6.5 illustrate the proposed residential area and surrounding environment. The proposed 'Residential 3F' zone would have conditions to restrict further subdivision, controls on the colour and design of buildings and fences, and links to the existing recreational areas of Halswell Quarry and Kennedy's Bush Walking Track as well as its own reserve areas (CCC 1994c: pp1-3).

The Kennedy's Bush proposal is particularly useful to help answer the above question for three reasons. Firstly, Kennedy's Bush is located on the Port Hills, a jealously protected 'Green Belt' area in Canterbury (by both planners and citizens) where any form of non rural use or development is controversial.

FIG. 6.5 AREA OF PROPOSED KENNEDY'S BUSH SUBDIVISION.



Above - small existing residential subdivision on Kennedy's Bush Spur. The presence of these houses makes it difficult to argue that more houses will have an adverse visual effect on the Port Hills.

Below - the rural amenity of and views from the beginning of the Kennedy's Bush track which will be lost if the proposal goes ahead



Secondly, the proposal is similar to that to subdivide Bottle Lake. Both areas have important recreational and aesthetic values but are not ecologically distinct, and both residential developments would be adjacent to existing settlements. Thirdly, the Kennedy's Bush proposal is particularly useful to analyse promoting sustainable management because all four key groups involved in the issue to date have related their understanding of the issue to both the purpose of the RMA 1991 and to the land's 'Green Belt' status in the operative Canterbury Regional Planning Scheme.

The four key groups involved in the proposal are: the developer - the van Asch Family Trust; regulatory authorities - the CCC and the CRC; and a community interest group - the Kennedy's Bush Residents Association (KBRA). The proposal has yet to be heard by the CCC and a full analysis of the issue in the format used in the previous case studies will not be undertaken. From the proposal, submissions and interviews with representatives from all four groups, the proposal will be used to study the types of adverse environmental effects of residential subdivision which are most important in promoting sustainable management.

6.8.1. THE DEVELOPER - THE VAN ASCH FAMILY TRUST:

The van Asch Family Trust wants to subdivide twenty-three hectares of its farmland to raise money to maintain the rest of the farm (Dan van Asch: pers. comm.) but like all development proposals under the RMA 1991 the subdivision has to be shown to promote the sustainable management of natural and physical resources.

The developer argues that the proposal promotes sustainable management because it provides a unique opportunity for low density residential living on the Port Hills which is close to the City, uses existing facilities and services, and does not have significant adverse environmental effects (CCC 1994d: p.12). Adverse environmental effects are assessed in terms of no adverse effects from the proposal on the immediate physical environment (slope stability, stormwater, soil quality et cetera); and adverse 'downstream' effects of traffic generation on local roads, and on sewer capacity and water supply are to be remedied. The location and design of the subdivision is argued to mitigate

adverse visual effects on the Port Hills vista; and the adverse effects on rural amenity of urbanising the start of the Kennedy's Bush Track are argued to be compensated by providing walking access between the Track and the Halswell Quarry Reserve and improved car parking facilities (Ibid: pp2-3).

The developer believes that the purpose of the subdivision should also be considered in assessing whether the proposal promotes sustainable management. The developer emphasises that the subdivision is not property speculation and creating another 'Westmorland' (a nearby intensive Port Hills subdivision characterised by some very creative architecture, Dan van Asch: pers. comm.). The proposal is intended to allow a subdivision which compliments the existing residential settlement and which will raise the funds needed to sustainably manage the remaining two hundred and thirty hectares of van Asch property as farmland on the Port Hills (Ibid: pers. comm.). This is a similar argument to that used by the CCC to justify subdivision of Bottle Lake as a trade off for protecting Travis Swamp.

In relation to the 'Green Belt' status of the land in the operative Canterbury Regional Planning Scheme, the developer claims that these provisions are not valid (CCC 1994d: p.12). This conclusion is based on a legal interpretation of the RMA 1991 S.367 that because a proposed Regional Policy Statement is in place for Canterbury, the provisions of the operative Regional Planning Scheme are no longer valid (Dan van Asch: pers. comm.). The developer claims that the proposal does not contravene any objectives for the built environment in the proposed Regional Policy Statement (CRC 1993) and that it enhances a recreational resource of regional significance (CCC 1994d: p.13).

The developer also pointed out that the lower slopes of Kennedy's Bush spur were identified as an area which was physically suitable for future residential development in the Canterbury United Council's Port Hills Study (1986: p.9) and in the draft statement of objectives and policies for the new City Plan (CCC 1992 : p.253, CCC 1994d: p.14). These documents do not have any statutory weighting but the developer argues that they indicate how the then CUC and the CCC want the Port Hills to be used as a resource (Ibid: p.14, Dan van Asch: pers. comm.).

6.8.2 REGULATORY AUTHORITIES - THE CCC AND THE CRC:

The CCC is the regulatory authority responsible for evaluating the proposed plan change and further subdivision on Kennedy's Bush Spur. The CCC considers whether the proposal promotes sustainable management in terms of its adverse environmental effects. The only adverse effects which the CCC is concerned about are effects on the recreational use, and visual and rural amenity values of Kennedy's Bush (Eric Johnson CCC: pers. comm.). The CCC agrees with the developer that accesses to and recreational use of the Kennedy's Bush Track is not affected because the subdivision is on private land; and note that it is difficult to argue that there are adverse visual effects of the proposal when there are houses already there (Ibid: pers. comm.). Opposition to the proposal from the KBRA must also be considered by the CCC in terms of adverse effects on people and communities which are part of the environment under the RMA 1991 S.2, but that opposition is also recognised to be of a NIMBY nature and an inevitable part of any any subdivision proposal (Erica Johnson: pers. comm.). Therefore the CCC's major concern with the proposal is the cumulative effect of the subdivision on overall development of the Port Hills (Ibid: pers. comm.).

The CCC interprets promoting sustainable management as allowing any activity unless it has adverse environmental effects (Environmental Policy and Planning Manager John Dryden: pers. comm.) which means that areas can only be excluded from residential development if that development has adverse environmental effects. The question for the CCC is how important are adverse effects on the existing residential community and on the Port Hills visual and recreational values in promoting sustainable management? Under the Town and Country Planning Act 1977 these cumulative and indirect effects were managed by zoning areas such as 'Green Belts.' The CCC is reasonably confident that the proposed conditions on further subdivision in the Residential 3F zone can be enforced to prevent further development of the area (Erica Johnson: pers. comm.) but there is nothing to guarantee that a similar plan change will not be proposed for this area in the future. Already neighbouring property owners Pagey Farms Ltd have requested that the proposed 'Residential 3F' zone be extended to include their property (Pagey Farms Ltd 1994).

The CCC have a different interpretation of the validity of the operative Canterbury Regional Planning Scheme to the proposal under S. 367 of the Act. The CCC's interpretation (and that of the CRC) is that because both a Regional Policy Statement and a Regional Coastal Policy Statement have yet to be notified the provisions of the operative Regional Planning Scheme must still be considered (RMA 1991 S.367). At the same time, because the Regional Policy Statement has been notified, the proposal cannot be inconsistent with the objectives in that document (Erica Johnson, Max Barber: pers. comm.). Therefore the important issues for both councils are: the relative importance of the 'Green Belt' provisions in the operative Regional Planning Scheme and therefore how the cumulative effects of the proposal are to be assessed; and how important those cumulative effects are relative to direct, site specific effects of the proposal in promoting sustainable management.

The CRC does not approve plan changes and issue resource consents to allow the proposed subdivision to take place but can oppose the proposed plan change if it is inconsistent with the Transitional Regional Plan or the proposed Regional Policy Statement. The CRC have made a submission opposing the proposed plan change because the proposal has not been assessed in terms of the provisions of Canterbury Regional Planning Scheme (CRC 1994). The CRC agrees with the CCC that the only adverse effects of concern are the cumulative effects of the subdivision, but have a slightly different interpretation of the role of cumulative effects in promoting sustainable management than the CCC.

The CRC believes that promoting sustainable management can justify preventing individual subdivisions which do not have adverse environmental effects on the site if they are located in an area where regulatory authorities do not want the City to expand (Laurie McCallum CRC: pers. comm.). Control of the direction of growth of the City is part of promoting sustainable management of the City as a whole by ensuring the sustainable use of facilities, energy et cetera (Ibid: pers. comm.). Therefore the CRC argues that the proposal should be delayed until the new City Plan which establishes the basis for the direction and control of growth of the City is notified; and that the developers should justify the location of the subdivision in terms of existing residentially zoned

areas on the Port Hills yet to be developed, not simply as the most suitable site on their property (CRC 1994, Laurie McCallum: pers. comm.). The CCC argues that there are no statutory grounds for forcing the developer to delay the proposal under the RMA 1991; and that as the developers are wanting to develop their own land to raise funds they do not have to justify the proposal in terms of the sites on the Port Hills (Erica Johnson: pers. comm.).

The CRC thinks that the proposal should be assessed in terms of both the 'Green Belt' provisions of the Canterbury Regional Planning Scheme (Chapter 14 S.1 Objectives (c), (d), (e), (h), and (i)) and the objectives of the proposed Regional Policy Statement (Chapter 12 Objectives 3 and 5 and Policy 5, CRC 1994). Although "Green Belts" are not used to control the direction and growth of the city in the proposed Regional Policy Statement the objectives for the built environment are similar to those which 'Green Belts' aimed to achieve: to maintain the rural character, amenity, landscape, ecological and recreational values of open spaces close to the City; and to consolidate urban development (CUC 1985: p.24, CRC 1993: pp165-167).

6.8.3 COMMUNITY INTEREST GROUP - THE KENNEDY'S BUSH

RESIDENTS ASSOCIATION:

The KBRA opposes the proposed subdivision and has lobbied both residents and recreational users of the Kennedy's Bush Track to get opposition to the proposal. The KBRA oppose the subdivision proposal principally because it will adversely effect their semi-rural residential environment (Sylvia Lukey KBRA Spokesperson: pers. comm.). The Association are also aware that as a NIMBY political argument this objection will not get a lot of support from planners or councillors so they have used other arguments, principally the adverse effects of urbanising the Kennedy's Bush Walking Track on the recreational values of Kennedy's Bush and the Port Hills, to get the support of other groups in the community (Ibid: pers. comm.).

The KBRA are unusual compared with other community interest groups involved in the case studies because they are arguing their objection to the proposal in terms of the RMA 1991 and promoting sustainable management. KBRA President Sylvia Lukey explains that although the association has not

had much experience with the public planning process they have good legal contacts and realised that they need to argue their submission in terms of the RMA 1991 because it is in terms of the law that the proposal must finally be evaluated (pers. comm.).

The KBRA have argued that the proposal does not promote sustainable management in two ways. Firstly, the Association argues that the adverse effects of residential development on traffic generation, sewer capacity, water supply and community facilities at Halswell and the visual effects of the subdivision will not be satisfactorily remedied and mitigated (KBRA 1994: pp 1-2). Secondly, the KBRA argues that the proposal does not promote sustainable management because it unnecessarily restricts future generations from using that part of the Port Hills for recreation (Ibid: p.2). The proposal is also argued to be inconsistent with S.6(b) of the Act which protects outstanding natural features and landscapes from subdivision as a Matter of National Importance, and S.7(c), (d) and (f) which provide for amenity values, the intrinsic value of ecosystems and environmental quality as matters to be considered in managing natural and physical resources (KBRA 1994: p.3). The Kennedy's Bush neighbourhood is argued to be an ecosystem in terms of the definition in the RMA 1991 S.2 which includes people and communities, which will be adversely affected by the proposed subdivision (Sylvia Lukey: pers. comm.). With respect to the 'Green Belt' status of the land at present, the KBRA is acting on advice from the CRC that the proposal has not considered the aforementioned objectives in the operative regional planning scheme (KBRA 1994: p.1, Sylvia Lukey: pers. comm.). The Association believes that 'Green Belts' should be retained to provide open space and recreational needs for the 'good' of the City (Sylvia Lukey: pers. comm.).

6.9 SUMMARISING SUSTAINABLE MANAGEMENT AND GREEN BELTS:

All groups assessed the proposal in terms of promoting sustainable management by managing the adverse environmental effects of the proposal on the immediate physical environment, 'downstream' services and facilities, and on the local community. What was disputed between the developer and the KBRA was not the type of effects caused by the proposal but whether they would be

satisfactorily avoided, remedied and mitigated. Like other groups in resource management issues the developer and the KBRA used the concept of sustainable management and the other relevant clauses of the Act to support the particular resource management outcome that they wanted.

The major issue in the proposal for both regulatory authorities is how to measure the cumulative effect of the proposal on development of the Port Hills. This sort of cumulative effect was managed by zoning 'Green Belt' areas under the Town and Country Planning Act 1977. 'Green Belts' are not a planning tool used by either authority under the RMA 1991 but cumulative effects of residential development on the visual and recreational values of the Port Hills are adverse effects which need to be considered in promoting sustainable management. The CCC and the CRC have slightly different interpretations on this matter. The CRC believe that the cumulative effects of subdivision in certain areas on the sustainability of the City as a whole should be considered in promoting sustainable management, whereas the CCC are taking the view that site specific effects are most important in assessing subdivision proposals. These different interpretations also reflect the different scale or viewpoint from which the two authorities are assessing the subdivision proposal: the CRC focussing on the City as part of a region and thus interested in the general direction of City growth; and the CCC on the Port Hills as part of the City. Neither council has considered the adverse effects on the semi-rural living environment of the existing Kennedy's Bush residents because, as predicted by the KBRA, these effects are considered to be NIMBY effects which result from any subdivision proposal. The CCC has lodged an appeal with the Planning Tribunal for a declaration on the extent to which the location of resource uses can be controlled to promote the overall sustainability of the City under S.310 of the RMA 1991 at present (Tony Hearn, Laurie McCallum: pers. comm.).

Three factors have contributed to different interpretations of the role of 'Green Belt' provisions in the Kennedy's Bush issue. Firstly, the location of the subdivision proposal on the Port Hills, a situational factor, means that the cumulative effects of the subdivision on visual amenity is an issue whether the 'Green Belt' provisions are in place or not. Secondly, the CCC and the CRC have different interpretations of the extent to which subdivision and residential

development can be controlled in promoting sustainable management and therefore approaches to assessing the proposal. In this sense sustainable management is a structure-culture factor influencing the resource management outcome. Thirdly, the recency and ambiguity of the transistional provisions of the RMA 1991 add confusion to the issue because the developer has a different interpretation of the relevancy of the operative Regional Planning Scheme from the regulatory authorities, and the authorities themselves are uncertain as to how much emphasis too put on 'having regard' to the scheme as is stipulated in the RMA 1991 S. 367.

6.10 CONCLUSION:

The Travis Swamp and Kennedy's Bush resource management issues have illustrated the role which legislation plays in influencing resource management outcomes in the local government public planning process. The Travis Swamp issue arose not from the requirement to promote sustainable management of natural and physical resources or even from the statutory requirement to protect wetlands under S.6(a) of the Act, but from changing values about the ecological importance of wetlands among some community groups which are in conflict with the existing resource use of Travis Swamp and which are not shared by all community interest groups. The statutory requirement to protect wetlands adds 'weight' to the CCC staff's decision to protect the swamp but was not the reason behind it.

Even with this requirement to protect wetlands under the RMA 1991 S.6(a) protection of all of Travis Swamp is not guaranteed because many other factors also influence the planning process including the economic and political feasibility of the proposal. The CCC is the only key group in the Travis Swamp issue who justified the proposal in terms of promoting sustainable management, but all key groups are promoting a form of sustainable management by trying to mitigate what they consider to be the adverse effects of infilling Travis Swamp or its proposed protection. Therefore even if these groups based their stance on the issue in terms of promoting sustainable management the issue would still be controversial because the definition of sustainable management in the Act includes addressing *any* adverse environmental effects which, coupled with the characteristics and land status of

Travis Swamp and Bottle Lake, means that these effects have to be traded off.

In this case study promoting sustainable management has been achieved by trading off the adverse effects of subdividing Travis Swamp and Bottle Lake based on a hierarchy of ecological importance. An assessment of a subdivision proposal at Kennedy's Bush was analysed to see whether this trade off is specific to the Travis Swamp issue or whether all subdivision proposals will be assessed in terms of their adverse environmental effects on the particular site rather than in terms of their contribution to the overall growth of the City; and therefore whether the ideas behind the 'Green Belt' concept of restricting growth in areas of recreational or aesthetic but not ecological value are still important in promoting sustainable management. The results of this assessment indicate that although both the CCC and the CRC are concerned about the cumulative effect of the proposal on the visual amenity of the Port Hills, this concern may result from the particular site characteristics of the Port Hills. The CCC appear to interpret promoting sustainable management as allowing development anywhere unless the proposal has adverse environmental effects on the particular site, but the CRC interpret sustainable management as still providing for control of the overall direction of growth of the City. Thus, as with the Northern Arterial issue, the ambiguous nature of the concept of sustainable management is resulting in different interpretations - in this case depending upon whether one is sustainably managing natural and physical resources as individual, site specific environmental media or as a collective City unit.

CHAPTER SEVEN ***PROMOTING SUSTAINABLE MANAGEMENT - AN EVALUATION***

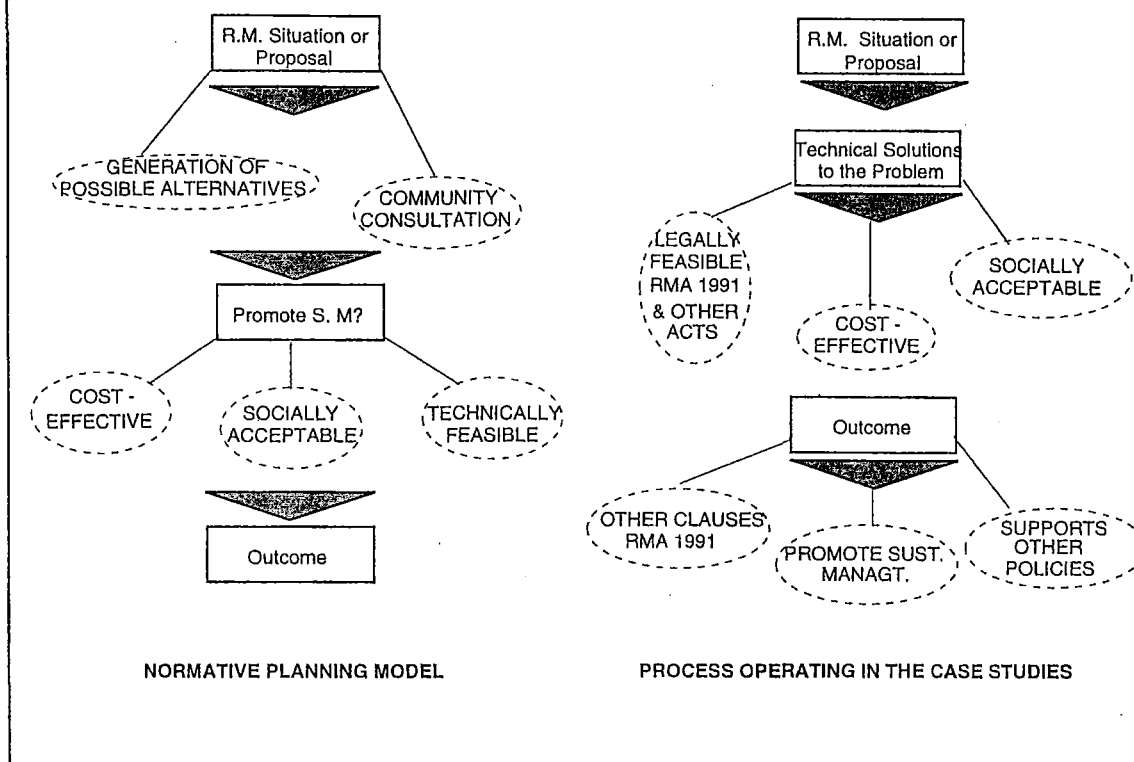
7.1 INTRODUCTION:

This thesis aimed to explore how sustainable management is being promoted in local government resource management issues, to date. Chapters Four to Six have analysed the public planning process within which local resource issues are being managed, and the place and understanding of promoting sustainable management within these processes. This chapter will undertake a comparative evaluation of the three case studies in order to establish some general understanding of who is promoting sustainable management, and where and how the concept features in local government resource management. A similar chapter format will be followed to that used in each case study. Firstly, the factors which are important to groups in resource management issues and the place and relative importance of sustainable management among those factors will be identified and analysed using situational, structure-culture and external factors. Secondly, what sustainable management has been understood to involve in the case studies will be established and compared with: the definition of sustainable management set out in the RMA 1991 S.5(2); and with a resource management issue which is dealt with under different legislation (air access into Westland National Park under the National Parks Act 1980) to illustrate that some of the difficulties in promoting sustainable management are more characteristic of changing social values and existing resource management practices than with legislation per se. Finally, continuities and changes in the three case studies over time will be summarised in order to establish the relative impact of the RMA 1991 and sustainable management in shaping resource management outcomes.

7.2 PUTTING SUSTAINABLE MANAGEMENT INTO THE LOCAL GOVERNMENT PUBLIC PLANNING PROCESS:

Figure 7.1 illustrates the relative of the RMA 1991 relative to the promotion of sustainable management in local government public planning in an 'ideal' or normative planning model and to the processes which have been studied in the three case studies.

FIG. 7.1 PUTTING SUSTAINABLE MANAGEMENT IN THE PUBLIC PLANNING PROCESS.



In the normative planning model promoting sustainable management of natural and physical resources is the factor which determines the resource management outcomes or alternatives which can be considered, and involves consultation with all groups to ensure that adverse effects are assessed before alternatives are selected. In the planning process which has operated in the three case studies, promoting sustainable management has been used to justify and give statutory support to a resource management outcome selected on the basis of what is 'technically' and economically feasible for the developer or regulatory authority and socially acceptable to councillors and/or community interest groups. Consultation takes place to assess the adverse effects of that outcome on other resource uses and values and to redress those effects where possible. Different factors are important to different groups involved in the process. Promoting sustainable management, as it is defined in the RMA 1991 S.5(2), is mostly considered by regulatory authorities and developers yet it is councillors who make the decision as to whether a particular resource management outcome will be adopted. Their decision is the result of a variety of factors of which the advice of council staff is only one.

Four factors can be identified which are common to all groups involved in the public planning process. Firstly, the existing resource management situation and proposal, and the effects of that situation or proposal on resources or environmental qualities of particular value to different groups. Environmental effects are a concern to developers as well as regulatory authorities and interest groups because developers are responsible for assessing and managing adverse effects under the RMA 1991 (S.88, and Fourth Schedule). In this sense all groups, whether aware of the RMA 1991 or not, are promoting a form of sustainable management by seeking to avoid, remedy or mitigate what they consider to be adverse effects from a proposal. Secondly, all groups have argued that the resource management outcome they want is for the 'community good.' The traditional planning value that the private interests of a few individuals can be sacrificed for the benefit of the wider community is prevalent in all case studies. Residents' Associations seeking to protect their private property from adverse effects particularly emphasise that they are protecting a 'community interest' so they will not appear 'selfish' (Hazel Ashton, Sylvia Lukey, Muriel Soanes, John Thacker: pers. comm, Travis Country Estates Ltd 1990: p.1). Lindblom (1980: p.113) notes that it is easy for regulatory authorities to justify their actions as benefiting the wider community and to dismiss the arguments of community interest groups as NIMBY politics because the majority of the public do not get involved in resource management issues. It is interesting that although the RMA 1991 makes 'participatory planning' mandatory through community consultation in formulating statutory planning documents and resolving resource management issues, the ideas of 'paternalistic planning' - planners making decisions for the 'community good' is still very strong in the case studies. Thirdly, consultation has been identified as important to all groups in all resource issues either to raise awareness of adverse effects of a proposal and to seek redress of these effects, or to 'sell' a resource management proposal or outcome to community interest and environmental groups. But despite its importance, only in the Mount Davy issue has the consultation process been considered successful by all groups involved, basically because the nature of the proposal is such that all adverse effects can be redressed while still allowing mining to go ahead. Finally, in the two controversial or 'political' resource management case studies, all groups have used a variety of arguments to support their particular view of the

resource management issue. These arguments do not determine the resource management outcome but are used to get support for a favoured outcome. Such arguments include: promoting Travis Swamp as an ecotourist attraction; and building the northern arterial to promote inner city activity. Opposing arguments such as the effect of the northern arterial on inner city traffic congestion, or how tourists are going to travel to Travis Swamp are not considered.

These four common factors have not resulted in a common understanding of resource management issues because each issue and its effects are interpreted differently by key groups. The consultation process and supporting arguments are used to promote these different understandings.

7.2.1 DEVELOPERS/REGULATORY AUTHORITIES:

Developers and regulatory authorities are the only groups (excluding the Kennedy's Bush Resident's Association) who have assessed resource management issues in terms of promoting sustainable management. It is a statutory obligation for developers to evaluate and manage the adverse effects of a resource management proposal under the RMA 1991 (S.32 and S.88) and the function of regional and territorial authorities to promote sustainable management (S.30 and S.31). In this assessment promoting sustainable management is not the *raison d'être* of a resource management proposal, but is used to legitimise proposals in terms of the law. The three most important *raison d'être* shaping the resource management proposals in the three case studies are: the existing resource management situation or opportunity and the way in which it is interpreted; the understanding that resource managers have of the appropriate techniques for managing the issues; and the resources available to the organisation with which to manage the situation or to undertake a proposal. For example, in the northern arterial resource management all three regulatory authorities understood the issue to be one of traffic congestion which needed to be redressed by increasing the road capacity. It is the severity of congestion and thus the need to build a new road which is disputed, and the reason why this is disputed is because of the cost of building the road. Similarly, the controversial Travis Swamp landswap has been proposed because the CCC cannot afford to designate all the land. Having selected a

resource management outcome based on these factors, that outcome is then justified in terms of resource management law. As John Dryden Environmental Policy and Planning Manager CCC notes the legislation "...is sometimes quite helpful and at other times is a nuisance" (pers. comm.).

Promoting sustainable management has shaped resource management proposals in that all developers and regulatory authorities have an obligation to both assess and manage the adverse environmental effects of the proposal. Other sections of the RMA 1991 have also influenced what developers and regulatory authorities can do in resource management. These sections are often more important than S.5 because they are more explicit, for example, the provisions to protect wetlands as a Matter of National Importance under S.6(a) or restricting the time to give effect to a designation under S.184. All sections of the RMA 1991 including S.5 are usually external factors influencing the resource management issue in that resource proposals have to be able to meet the provisions of the RMA 1991, but the proposals themselves are not formulated on the basis of the RMA 1991. All developers and regulatory authorities want their proposals to be acceptable to the local community because of their own professional reputation as resource managers, and because they have to convince councillors to adopt the proposed resource outcome and councillors are the political representatives of the community.

7.2.2 COUNCILLORS:

In the two controversial or 'political' case studies, councillors have formed a separate key group because their views on the resource issues differ from both one another and council staff. Councillors, as political representatives of the local community, have the final decision in adopting a resource management outcome, but most of the councillors interviewed in this research have only a very limited awareness of the RMA 1991 and the concept of sustainable management. There is a general understanding that it is the function of council staff to ensure that resource management proposals are within the legal provisions of the RMA 1991 and other legislation, but at the same time not all councillors adhere to the advice of the council planners. The factors which are important to councillors in the resource management issues are: the advice of

council staff; the wishes of community interest groups; political party policies; and the personal values and beliefs of councillors. The relative influence of these factors varies between individual councillors and resource management issues. For example in the northern arterial case study the nature of the issue means that councillors are divided along party lines with Labour Councillors opposing the road and Citizen Action Councillors supporting it; while protecting Travis Swamp has divided councillors more on their own personal beliefs about the ecological importance of the wetland.

The one factor which appears to be of concern to all councillors in all resource management issues is the cost of proposals when the regulatory authority is the developer, and whether this is a wise use of ratepayer's money. Cost is particularly important in proposals such as the northern arterial and Travis Swamp which involve spending large sums of money on projects which are controversial.

Some councillors are very aware of particular environmental issues due to their personal knowledge and expertise, but Councillor Garry Moore notes that most councillors do not have the time and many the intellectual inclination to read all the information about resource management issues let alone to understand the RMA 1991 (pers. comm.). The councillors interviewed in this research have tended to consider the RMA 1991 and sustainable management as either an 'innovative' approach to resource management, emphasising not only direct environmental effects but indirect environmental effects and the sustainability of resource uses; or to be 'business as usual' but by focussing on effects rather than on activities. It is only among those councillors taking an innovative approach to the Act that sustainable management is being considered in formulating resource management outcomes. Councillor Linda Constable believes that, sustainable management is such a difficult concept to grasp that most councillors and many planners take a 'business as usual' approach because that is what is manageable and workable (pers. comm.).

7.2.3 COMMUNITY INTEREST GROUPS AND ENVIRONMENTAL ORGANISATIONS:

Community interest groups, excluding the Kennedy's Bush Residents

Association, have not considered resource management issues in terms of promoting sustainable management. Many of the other groups are aware of the RMA 1991 and, as with developers/regulatory authorities, some have used clauses from the Act to support their particular stance on issues. The most important factors to community interest groups in the case studies are: redressing what the groups consider to be adverse effects from the existing resource situation or the proposed outcome; and the resources available to these groups with which to do this. O'Riordan noted (1971: pp 100-101) that community interest groups tend not to get involved in resource management issues until they are directly threatened; and that they tend to leave the complex decision-making to planners and politicians but are dismayed with the outcomes. The community interest groups involved in the local government public planning process associated with the case studies demonstrate these characteristics. Groups have tended to get involved when their interests are directly threatened which means that they are uncompromising in the resource management outcome that they want. For example, Friends of Bottle Lake only became involved in the Travis Swamp issue when Travis Country Estates Ltd selected Bottle Lake as an alternative development site. Groups opposing proposals have not suggested alternative outcomes but have expected the developer or regulatory authority to do so.

The strength of a community interest group's opposition to a proposal depends on the resources available to the group, particularly technical expertise and/or political influence with councillors. The KBRA had access to legal expertise and were therefore aware that they needed to argue their submission in terms of the RMA 1991 (Sylvia Lukey, KBRA: pers. comm.). Similarly, the SARA have attributed their ability to take the northern arterial issue to the Planning Tribunal twice to be because they had the support of transport and resource management professionals who were not 'phased' by the technical language used by the CCC and the NRB (Muriel Soanes: pers. comm.). The Travis Wetland Trust has also benefited from the knowledge of environmental scientists in their bid to protect Travis Swamp. Community interest groups who have opposed resource proposals have found it particularly difficult if the developer is a regulatory authority because they feel that there is no one to represent their interest and that they are disadvantaged by the knowledge and

influence of the authority (Hazel Ashton, Eric Osmer, Muriel Soanes: pers. comm.).

The two environmental organisations studied as part of this research, the RFBPS and the DOC, both have comprehensive interpretations of promoting sustainable management but, like community interest groups, have particular resource management outcomes they want to secure and/or environmental effects they want to avoid. The clauses of the RMA 1991 are used to lend statutory 'weight' to those outcomes where appropriate. The concept of sustainable management is not used by the RFBPS to determine their stance on resource issues because it is a concept involving both conservation and development and the RFBPS is only interested in conservation and protection of indigenous flora and fauna (David Alexander: pers. comm.). The DOC associates sustainable management with conservation, because the matters covered in S.6 and S.7 of the RMA 1991, (which are designed to be guidelines to the sorts of things to be considered in promoting sustainable management, Ministry for the Environment 1991: p.1), include several conservation clauses (West Coast Conservancy 1994: p.1).

7.2.4 FACTOR ANALYSIS:

In each resource management issue an analysis was undertaken to identify the underlying factors which have contributed to the way in which resource issues are understood and resolved, and why they may be controversial. Situational factors - the characteristics of the proposal, structure-culture factors - the functions, values and resources of the groups involved, and external factors - other factors not characteristic of the proposal or the groups involved, were identified. The RMA 1991 and promoting sustainable management can feature as either a structure-culture or an external factor influencing the resource management issue.

Situational factors have been important in shaping all the case studies because no groups involved in any of the resource management issues have opposed the proposed resource use - road building, mining or subdivision per se. The groups are all involved because the resource proposal has potential or existing adverse effects on a resource or environmental quality of value to them.

Therefore the location and nature of the proposal and the ability and willingness of the developer to redress adverse effects has determined who else is involved in the issue and whether it is controversial. For example, the main reasons why the Mount Davy mining proposal is not a controversial resource management issue is because it is located at Rewanui, an area of established mining practice which has few other resource uses or areas of conservation value which are adversely effected by the proposal, and because Coalcorp is both willing and able to redress the adverse effects identified by community interest groups to their satisfaction, while still allowing mining to go ahead.

Interpretations of promoting sustainable management are emerging as structure-culture factors influencing resource management proposals for some developers, regulatory authorities and councillors. For example, TNZ has taken a basic stance that building new roads in areas where a road network exists is not promoting sustainable management irrespective of the severity of congestion (Robin Odams: pers. comm.), and the CCC and CRC have different approaches to assessing subdivision proposals based on interpretations of promoting sustainable management. The West Coast Regional Council's approach to promoting sustainable management based on allowing most resource use and development and minimising adverse environmental effects has influenced not only resource management outcomes but the extent of involvement of interest groups in resource issues. Ambiguity in the definition of sustainable management in the RMA 1991 S.5(2) These different approaches to promoting sustainable management are a result of ambiguity in the meaning of sustainable management in the RMA 1991 S.5(2).

Three other structure-culture factors are also influencing the way in which the case studies are resolved. Firstly, the functions of the groups involved determine the way in which they assess the issue. For example, the RFBPS and the DOC have mandates to protect indigenous flora and fauna and natural and historic resources, respectively, and so assess all proposals in these terms. Similarly, private sector developers are proposing resource uses for economic gain but regulatory authorities are redressing conflicts in resource use for community benefits, though they must still be cost-effective.

Secondly, and related to the functions of each group, is the community or area which the group represents which means that issues are considered at different spatial scales. It was noted in both the northern arterial and Travis swamp case studies that while community interest groups, especially residents associations, perceive resource issues in terms of effects on their neighbourhood regulatory authorities are considering the issue from a 'city wide' perspective. In the northern arterial case study, TNZ was assessing the proposal on a national scale.

Thirdly, the resources available to all groups have already been noted as important in determining both what resource management options are feasible and how influential community interest groups can be in the local government planning process. Lindblom (1980: p.74) notes that businesses and regulatory authorities have an advantage in the public planning process because of their inherent organisation and access to resources compared with community interest groups. This observation was echoed by the community interest groups involved in this study (Jim Russell, Sylvia Lukey, Eric Osmer, Muriel Soanes: pers. comm.). Even well resourced environmental organisations such as RFBPS claim that the cost and work involved in considering and appealing resource consent applications and proposals under the RMA 1991 means that they can only focus on the most 'objectionable' proposals (The Christchurch Star 15/10/94, Bill Gilbertson: pers. comm.).

Three external factors can be identified as influencing the resource management issues. The first of these factors is the RMA 1991 and promoting sustainable management. Evaluating and managing the adverse environmental effects of a resource management proposal is recognised as a responsibility for all developers and regulatory authorities, and all three case studies were assessed in terms of their environmental effects. For the roading and mining issues this evaluation was particularly important because state coal mining was excluded from the public planning process under the Coal Mines Acts 1925 and 1979; and roading was a 'right' of landuse under the Town and Country Planning Act 1977. Interpretations of other sections of the Act have also influenced resource management issues: for example, the relative importance of the Canterbury Regional Planning Scheme under S.367; or whether part of a

designation can be transferred under S.179 of the Act. The recency of the legislation means that in many respects these other sections were just as ambiguous as the meaning of sustainable management because the Planning Tribunal has not made rulings on most sections of the Act and when placed in the context of resource management issues different authorities have different interpretations of what the sections mean.

The second external factor which has affected all three case studies is changes in social values which clash with existing resource management practices, and the fact that those values are not shared by all members of the community, for example, protecting wetlands, and alternative traffic management to road construction. It is these changes in social values which make resource management issues controversial. In the Mount Davy case study the socio-economic situation on the West Coast has been identified by regulatory authorities and community interest groups as an important consideration in resource management. This is not characteristic of the Christchurch case studies and its influence in the Mount Davy case study is limited because the RFBPS and the DOC both stated that the demand for employment on the West Coast was definitely not a consideration for them in assessing the proposal (Gain Smith, Bill Gilbertson: pers. comm.).

7.2.4 RESOURCE MANAGEMENT OUTCOMES IN LOCAL GOVERNMENT PLANNING:

The local government planning process is influenced by the values and factors which are important to developers, regulatory authorities, councillors, a variety of community interest groups, and environmental organisations. Developers and regulatory authorities tend to be the only two groups who consider the resource management issue in terms of promoting sustainable management, even though it is councillors who make the final decision as to whether a resource management issue shall be adopted. Even among regulatory authorities and developers sustainable management is not a primary factor determining resource management outcomes.

O'Riordan notes that resource management is a choice between alternatives which are determined within an economic, political, social and institutional

framework (1971: pp109-110). Similarly, the factors which have determined resource management proposals in the case studies are: the existing resource management situation; and resource management options which are 'technically' and economically feasible, and socially acceptable. Promoting sustainable management is part of this decision in that developers/regulatory authorities have to evaluate and manage the associated adverse environmental effects, but having to manage effects does not usually determine the resource management proposal unless more than one option is appropriate in which case a decision may be based on the option which has the most easily managed environmental effects. The resource management outcome is then argued in terms of promoting sustainable management because it is the legislation which legitimises the resource management outcome, and it is in terms of the law that the decision may be appealed to the Planning Tribunal. The ambiguity and generality of the definition of sustainable management in the RMA 1991 S.5(2) makes it particularly easy to do this, but being able to justify any proposal in terms of the law appears characteristic of resource management. Bates (1991: p.98) notes that in cases to the Planning Appeal Board in Australia that: "each proponent of a development project will claim that their project is sustainable, appropriate, sensitive and balanced."

Although promoting sustainable management is in the words of Councillor Linda Constable: "a 'cling on' not a *raison d'être* for doing resource management," the factor analysis has illustrated that interpretations of sustainable management are important in determining how some regulatory authorities justify their approach to managing resource issues. An understanding of what sustainable management involves has emerged from the case studies. This understanding can be used to indicate how the ambiguities in the definition of sustainable management in S.5(2) of the Act are being interpreted in resource management practice.

7.3 SUMMARISING SUSTAINABLE MANAGEMENT:

Figure 7.2 summarises the elements of sustainable management which are considered by different groups in the case studies. Although, as discussed, many groups did not relate promoting sustainable management in terms of the RMA 1991 to the resource issues, all groups are implementing a form of

sustainable management by seeking to redress what they consider to be the adverse effects of the proposal. Indeed it is managing adverse effects, S.5(2)(c) which has been largely focussed on by all groups in promoting sustainable management. Retaining the life support capacity of ecosystems (S.5(2)(b)) is usually incorporated into managing adverse effects.

FIG. 7.2 SUMMARISING SUSTAINABLE MANAGEMENT.

FIG. 7.2 SUMMARISING SUSTAINABLE MANAGEMENT.											
GROUPS	Aware S.M.	Effects - Env't.	Effects - Comm.	Temp / Perm	Indirect Effects	Soc Ec Effects	Matters S.6 7 S.7	Site Specific	Future Gens	Cost - Effective	Accept. Comm.
Private Devper	Yes	Yes	Yes	Mostly Perm	No	No	Yes	Most Impt.	No	Most Impt.	Preferable
Reg Auths	Yes	Very Impt.	Very Impt.	ChCh Yes WC No	Some	No	Very Impt.	Yes	Yes	Very Impt.	Yes
						WCRC Yes					
Councillor	Some	Yes	Very Impt.	Both	Some	Value of Property	Some	Very Impt.	Some	Most Impt.	Most Impt.
Comm. Int. Gps.	Some	Very Impt.	Very Impt.	Both	Some	Value of Property	Only KBRA	Most Impt.	Only KBRA	No	Most Impt.
Env'tal Reps	Yes	Most Impt.	Yes	Both	Some	No	Very Impt.	Rel. to Effects	Yes	No	Preferable
Tangata Whenua	Yes	Areas Cult. Sig.	On T.W.	Both	No	Opps. for T.W.	Very Impt.	Most Impt.	Yes	No	Only to T.W.

The sustainable management of natural and physical resources is promoted by managing the adverse effects on individual resources or environmental media. The overall effect of using several resources in a spatial area or ecosystem in a proposal are not considered in an integrated approach as yet. This approach reflects traditional resource management practices and is reinforced by the RMA 1991 in which responsibility for individual resources such as land and water is divided between regional and territorial authorities. All groups in all case studies accepted that it is the responsibility of the developer/regulatory authority to evaluate and manage the adverse effects of the proposed resource use on the surrounding physical environment including people and communities for the time of the resource use; and the responsibility of regulatory authorities to see that this is done.

Adverse effects are also understood by all groups to be site specific as

opposed to establishing general standards below which a resource use has an adverse effect. The RMA 1991 makes provision for the Ministry for the Environment to establish national standards for water, soil and air quality and for noise and contaminants (S.24) and the CRC tried to establish regional standards for air quality, but because the adversity of environmental effects varies with space, time, weather conditions and activities, found that approach to managing adverse effects to be unworkable (Max Barber: pers. comm.). It is also interesting that the Ministry for the Environment has yet to produce national quality standards.

Some regulatory authorities and interest groups interpret adverse effects to be relative to the existing level of site degradation - that is more adverse effects are acceptable in an area which is already polluted and modified than in a pristine area. Other groups argue that enhancing environmental quality is part of promoting sustainable management as a matter to be considered under S.7(e) of the Act. This issue again results from ambiguity in the RMA 1991, S.7 including factors to be considered in managing natural and physical resources but not explicitly included in the meaning of sustainable management in S.5(2). Where a proposal is designed to manage an existing resource issue it is generally accepted that sustainable management is not promoted if the proposal has worse environmental effects than the existing situation - the 'do nothing' scenario.

All regulatory authorities understand that permanent effects have to be addressed but there are differences of opinion about temporary effects. Neither the West Coast Regional Council nor the Grey District Council are concerned about the temporary effects of aspects of Coalcorp's mining proposal on Seven Mile Creek or on the land; but TNZ and the CCC have assessed the effects of both constructing and operating a northern arterial road or alternative traffic management option. The RMA S.3(b) defines effects to include all temporary and permanent effects. Part of this confusion may come from the general understanding that the RMA 1991 focuses on effects not activities which may result in a 'grey' area between what is an activity and a temporary effect; or from the values which are important to regulatory authorities on the West Coast. Indications given by two mining companies on the West Coast is that

sustainable management is about 'cleaning up your own mess' (Frank Taylor Greymouth Coal Ltd, Steve Riddell, Ron Hibbs: pers. comm.). Focussing on the permanent effects of mining corresponds with this interpretation.

All regulatory authorities and environmental organisations have looked at the immediate 'downstream' effects of resource uses such as those on the road network of trucking coal to Stillwater or on water and sewer capacity of allowing further subdivision of Kennedy's Bush. Less direct effects are more complicated and tended to be used as supporting arguments for a resource management outcome rather than assessed as effects to be managed as part of the proposal, or recognised to be potential effects which will be included in promoting sustainable management as resource managers develop the skills to better assess these effects and resource users get used to the idea of evaluating and managing them as part of resource management.

Socio-economic effects, excluding the effects of a proposal on the living environment of people and communities, are only an explicit part of assessing sustainable management for one regulatory authority - the West Coast Regional Council. The West Coast Regional Council considers the sustainability of the industry using resources and the availability of alternative employment as part of promoting sustainable management (1994: p.19). This approach is based on an interpretation that enabling people and communities to provide for their economic and social well-being is as equally important as protecting the environment and ensuring resource sustainability in promoting sustainable management (West Coast Regional Council 1994: p.19) and is an example of Fisher's (1991: p.51) alternative interpretation of sustainable management using the word 'while' as a co-ordinate conjunction. This interpretation is not reportedly used by West Coast regional Council staff (Wayne Harrison Planning Manager, Dave Coll Resource Consents Officer, West Coast Regional Council: pers. comm.).

The socio-economic aspects of promoting sustainable management which are considered by developers, regulatory authorities and councillors in the case studies are that firstly, resource proposals are cost-effective. It is generally understood that if a proposal is not cost-effective then it is not sustainable even

though cost-effectiveness is not part of the definition of sustainable management in the RMA 1991 S.5(2). Secondly, it is preferable that resource management proposals are socially acceptable to the community. Social acceptability is not part of the definition of sustainable management in S.5(2) either, but both cost-effectiveness and social acceptability are important parts of the local government public planning process.

Factors listed in S.6 and S.7 of the Act are understood by regulatory authorities and developers to provide guidelines in promoting sustainable management. This understanding follows the interpretation given by the Ministry for the Environment (1991: p.1) and a proposal which does not contravene these matters has been suggested by one developer and one regulatory authority as therefore promoting sustainable management (Dave Coll, Dan van Asch: pers. comm.).

Ensuring resource sustainability was not raised as an issue in the Mount Davy case study because minerals are excluded from this clause in promoting sustainable management (S.5(2)(a)). In the other two case studies two interpretations of ensuring that resources have the potential to meet the reasonable foreseeable needs of future generations, have emerged: proactive provision for these needs; and not unnecessarily restricting the use of resources. The RMA 1991 does not stipulate how S.5(2) is to be implemented and so provides another example of how ambiguity in the definition of sustainable management is being used to accommodate different resource management outcomes. The Ministry for the Environment's interpretation is that S.5(2)(a) is not a justification for doing something because it is up to future generations to provide for their own needs (Ministry for the Environment 1991: p.2). The understanding is that resources should not be overexploited or used unnecessarily (Ibid: p.2), but this is not explicitly stated in S.5(2)(a).

Sustainable management is being promoted largely by managing the adverse effects of resource use and development on the environment. All developers and regulatory authorities use the terminology of the Act - avoiding, remedying or mitigating these effects (S.5(2)(c)) excluding the West Coast Regional

Council which uses the terminology of minimising effects (1994: p.14). A hierarchy of adverse effects appears to be being established in resource management issues based on ecological and scenic importance. Areas of rare or unique ecological value, unique landscape or scenic values, and pristine examples of natural or historic resources, cannot be compromised; and areas of special local significance such as the Port Hills can only be used if the resource proposal takes into consideration these special values. Adverse effects tend to be managed in reality by trading off positive and negative effects. For example, allowing subdivision in Bottle Lake is a trade off between the adverse effects of developing Travis Swamp and what is cost-effective. Similarly, the van Asch Family Trust argues that the loss of rural amenity on Kennedy's Bush Track resulting from their proposed subdivision is mitigated by the provision of additional recreational facilities in the subdivision (van Asch 1994 p.3). The RMA 1991 S.5(2)(c) does not say that adverse effects can be traded off but both positive and negative effects are included in S.3 of the Act. The Planning Tribunal has reportedly interpreted this to mean that a form of mitigation may include trading off adverse effects for positive effects in resource management issues (Hearn 1994).

Effects that are well managed seem to be those which are tangible, measurable effects on the environment such as a certain level of pollution or loss of a habitat for a rare species. What is controversial, is managing effects such as visual effects and rural amenity which are interpretive and subjective. These effects are also difficult to manage in individual resource management issues because planners are not experienced in doing so. Under the Town and Country Planning Act 1977 these effects were managed by zoning and not assessed for individual proposals. It was noted in the Kennedy's Bush proposal that the main problem for both the CCC and the CRC is to assess the relative importance of cumulative effects compared with site specific effects of subdivision proposals in promoting sustainable management.

The difficulty in managing and assessing these more subjective, less tangible effects is not exclusive to the RMA 1991 and promoting sustainable management. A brief assessment of a resource management issue being dealt with by the West Coast Conservancy under the National Parks Act 1980

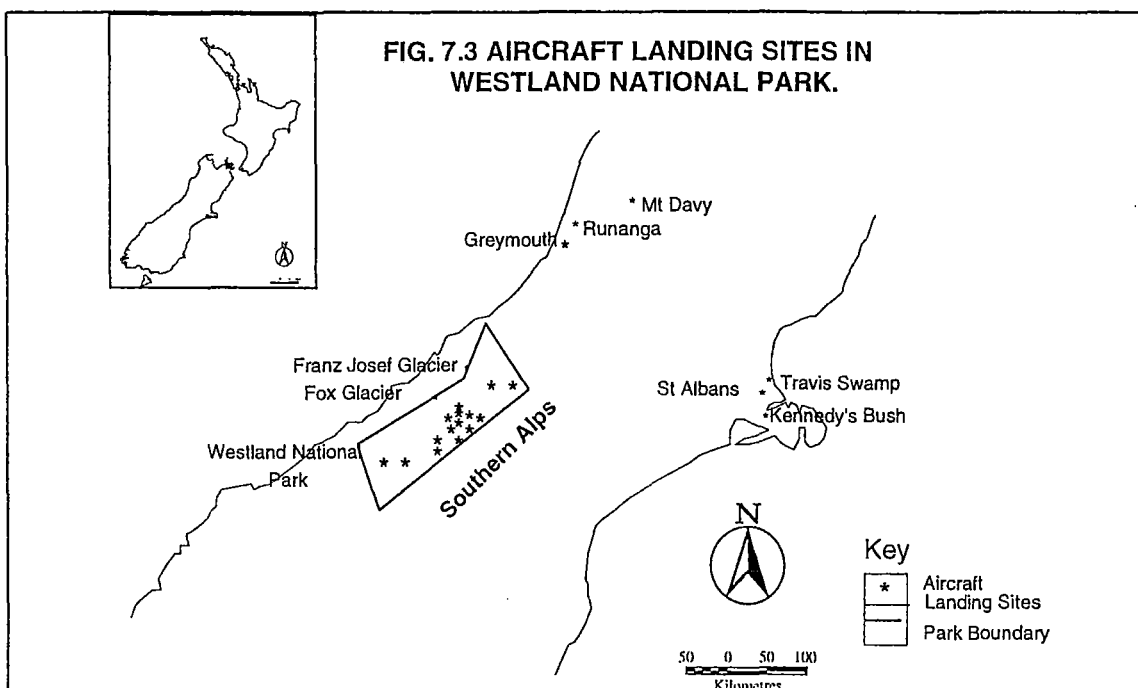
suggests that difficulties in managing these effects may be a result of a combination of changing values among some Park users which are not shared by aircraft operators; and difficulties in assessing the type of adverse effects which are resulting. The RMA 1991 provides for these changing social values but so does the National Parks Act 1980. The problems in implementing these provisions of the Acts are again prudent reminders of the relative importance of legislation in resource management issues.

7.4 AIR ACCESS INTO WESTLAND NATIONAL PARK:

The West Coast Conservancy is responsible for administering Westland National Park within the provisions of the National Parks Act 1980 and the Conservation Act 1987. The most significant resource management issue for the Conservancy in the Park is the effect of noise from aircraft on the remote or wilderness experience being sought by other users of the area (Kathryn Groome Tourism Liaison Officer West Coast Conservancy, Chris Hickford DOC Field Centre Manager Franz Josef Glacier: pers. comm.). This is a resource management issue which has resulted from changing recreational uses and values some of which are inconsistent with existing resource management practices.

The resource management issue has arisen due to a combination of increased use of helicopters for sight-seeing, by trampers and climbers to access remote areas, and for heli-skiing (DOC West Coast Conservancy 1993: p.33). Four aircraft operators are currently licensed to operate a total of twelve aircraft in the park (three helicopter services and one skiplane operation), in the area illustrated in Figure 7.3. While use of aircraft is increasingly popular with some tourists and recreationists, others are increasingly valuing National Parks for their remote, wilderness qualities as well as their scenic values; and the DOC is keen to foster these values (DOC West Coast Conservancy 1993a: p.9, Kathryn Groome, Chris Hickford: pers. comm.). Thus a resource management issue exists in two ways: firstly, the DOC and the West Coast Conservation Board have received some complaints by Park users about aircraft noise; and secondly, the DOC consider that they have a statutory responsibility under the National Parks Act 1980 and the Conservation Act 1987 to manage aircraft noise at a level which does not detract from other resource users' remote

experiences in Westland National Park.



Under the National Parks Act 1980 S.6 national parks are to be preserved for their intrinsic worth and for the benefit, use and enjoyment as public areas of New Zealand. The general policy for National Parks S.21 provides for a 'balance' of aircraft use in and public enjoyment of the park recognising that aircraft noise disturbs the peace and tranquillity of these areas (National Parks and Reserves Authority 1981: p.40). Under the Conservation Act 1987 the DOC has the function to manage natural and historic resources for conservation (S.6(a)) and to foster recreation and tourism to the extent that it is not inconsistent with conservation (S.6(d)). Under S.2 of the Act conservation means:

"preservation and protection of natural and physical resources for their intrinsic values; providing for their appreciation and enjoyment by the public...."

Noise from aircraft is considered to undermine the intrinsic worth or value of Westland National Park - its tranquil and remote environment, and to detract from public use and enjoyment of the area for these qualities.

Managing this resource management issue is complicated by several factors: the nature of the adverse effects to be mitigated; the different values of the

groups involved in the issue; the authority the DOC has within which the issue must be managed; and the history of air access into Westland National Park and existing air access conditions.

FIG. 7.4 AIRCRAFT IN THE FRANZ JOSEF GLACIER NEVEE.



Tracks in the Snow From Landings on Gieke Glacier, Franz Josef Nevee.



Passengers enjoying the quiet of a Mount Cook Skiplane landing on with the engines turned off.

The only adverse effect from air access into the Park is noise. The aircraft make no physical impact on flora and fauna in the area, leaving only tracks in the glacier nevees as illustrated in the plates in Figure 7.4, and noise effects are intermittent and often of short duration. In this sense air access onto the glacier nevees has fewer adverse effects on conservation values than other forms of access including tramping (Chris Hickford: pers. comm.). The effects of aircraft noise on people's remote experience in a national park are, like visual effects and effects on rural amenity noted in the other case studies, very subjective and difficult to measure because they are specific to time, place and individual person's values, experiences and even moods (Alec Miller: pers. comm.). Therefore it is very difficult to establish a level of aircraft noise which does not conflict with other resource users, and also makes it difficult for the DOC to convince aircraft operators that there is a resource management issue, particularly when many trampers and climbers are using aircraft to get into remote areas. Because sound travels it is also very difficult to mitigate the effects of noise beyond restricting aircraft use and the available technology to reduce engine noise. Unlike other resource uses and visual impacts, those of aircraft noise cannot be confined to a certain area.

The different functions and values of the groups involved in the issue also make the issue difficult to manage particularly when the effects of aircraft noise on other park users is hard to measure. The West Coast Conservancy manages national parks from a very conservation oriented approach which emphasises preservation and protection. Recreational use is very much a 'secondary' consideration (Murray Reedy Manager Protection and Use West Coast Conservancy: pers. comm.). Therefore any actual or potential adverse effects from aircraft noise are considered very seriously by the DOC whether they receive complaints or not. This approach to managing conservation areas is a function of two factors. Firstly, the DOC was established as a new regulatory authority to administer the Conservation Act 1987 and other protective legislation; and secondly, the West Coast Regional Council's 'pro-development' approach to resource management has been indicated by West Cost Conservancy staff to reinforce their own 'pro-conservation' approach (Gavin Smith, West Coast Conservancy: pers. comm.).

The aircraft operators are providing a service and making a living. All the operators interviewed for this research appreciated that the conservation of Westland National Park was important for their own economic survival, but all operators also pointed out that the aircraft have no physical impact on the area (Mel Greer Mt Cook Skiplanes, James Scott Fox and Franz Josef Glacier Heliservices Ltd, Colin Tuck Glacier Helicopters Ltd: pers. comm.). Neither of the helicopter operators thought that noise was an issue in the Park, both pointing out that trampers and climbers use the helicopters to access remote areas and that they have never received any complaints about the noise of their craft from members of the public (Colin Tuck, James Scott: pers. comm.). Mt Cook Skiplanes Ltd was a little more aware of the potential impact of noise on park users than the helicopter operators. Part of the service offered by this company is that the skiplanes' engines are turned off on the glacier neves so that passengers can experience the silence and remoteness of the area. During a period of intense rivalry between aircraft operators in the Park this experience was being ruined by helicopters landing alongside the skiplanes on the neves (helicopters cannot turn their rotors off on the neves for mechanical reasons, Mel Greer: pers. comm.). This problem has been resolved among the aircraft operators and Mel Greer believes that the different air services offer visitors a choice in the sort of experience they can have (pers. comm.). All three operators interviewed also noted that a substantial amount of aircraft noise in Westland National Park was caused from overflying aircraft over which the DOC has no control (Mel Greer, James Scott, Colin Tuck: pers. comm.). Colin Tuck also pointed out that the DOC has restricted air access into other National Park areas where people wanting remote experiences can go, for example, Mount Aspiring and Mount Cook National Parks (pers. comm.).

Other tourist operators and local residents in Franz Josef and Fox Glacier do not believe that aircraft noise is a significant resource management issue in Westland National Park. Alpine Guides Ltd proprietor and West Coast Conservation Board member Mike Browne also pointed out that helicopters are used by most trampers and climbers to get onto the glaciers especially during periods of rapid advance such as at present when the glacier termini are unstable (pers. comm.). The number of parties tramping into remote areas in the glaciers who may be annoyed with aircraft noise is estimated to be only two

or three a year and Mike Browne suggests that the DOC could request that aircraft avoid these areas when such parties are present (pers. comm.). Mike Browne commented that the feedback he receives from visitors to the Park is that they dislike being 'badgered' by aircraft operators to use their services, not the noise from the aircraft (pers. comm.). Similarly District Councillor and tourism proprietor Ralph Fegan commented that most visitors regard the aircraft as a novelty, and that while it can get noisy for Franz Josef residents with the helipads less than two hundred metres from the main road, most locals associate the noise with periods of economic activity in the area and are busy themselves with associated tourist trade (pers. comm.). Ralph Feegan commented that he: "would not like to see twenty aircraft going at once" (pers. comm.).

The Westland District Council also noted that they have only five recorded complaints of aircraft noise disturbing visitors in Westland National Park in the last five years (Richard Simpson Manager Planning and Regulations Westland District Council: pers. comm.).

The authority which the DOC has also limits the way in which the issue can be managed. The DOC has control only over land and airspace under five hundred feet in National Parks (Kathryn Groome: pers. comm.). The only way in which aircraft noise can be managed is by controlling where, how often and what type of craft can land in the Park. The DOC cannot control aircraft flying over the Park which both the aircraft operators and the DOC acknowledge contribute significantly to noise effects in the remote areas of Westland National Park. The DOC has negotiated some conditions with the Civil Aviation Authority (CAA), for example, restricting air craft to two thousand feet over the White Heron colony during breeding, but apart from the fact that aircraft noise is not a major priority for the CAA (Kathryn Groome: pers. comm.), they cannot restrict freedom of airspace (Alec Miller: pers. comm.). The Westland District Council controls aircraft noise on land outside the boundaries of Westland National Park but these controls can only relate to the location and operation of airstrips with respect to the effects of noise on residential areas.

Site characteristics and the history of aviation in the area also make it difficult to

manage this resource issue in two ways. Firstly, the glacier valleys provide access corridors between the mountains in Westland National Park so both aircraft and other users are concentrated in these small areas which magnifies the effects of aircraft noise. Secondly, the glaciers have a long history as tourist attractions, and Westland a long association with aviation due to the rugged nature of the terrain and frequent flooding which restricted road access. Scenic flights in Westland National Park were begun by Mount Cook Airline (then THA) in 1952 and the number of operators and landing sites has grown incrementally over the years as demand for air services has increased (Ralph Feegan: pers. comm.). Aircraft in Westland National Park are therefore quite acceptable for local residents and aircraft operators.

All resource management issues involve managing the effects of one resource use on other resource uses or values irrespective of the purpose for which resource management is done - to promote sustainable management, conservation, wise use of resources et cetera. The resource management issue of air access into Westland National Park has arisen and is difficult to manage because the DOC and some trampers and climbers value Westland National Park for its tranquillity and remote experience value which conflicts with existing and increasing aircraft operations in the Park. As with the other case studies, a combination of: situational factors - the characteristics of noise effects and air access in Westland National Park; structure-culture factors - the values and functions of the DOC and tourist operators; and external factors - increasing recreational use of aircraft and remote experience values of national parks all shape the way in which the issue has arisen and can be managed irrespective of the legislation.

The Westland National Park case study has illustrated that the effects of resource management issues can be difficult to measure not only because the provisions in legislation may be ambiguous, but because of the nature of the effects and a variety of other situational, structure-culture and external factors. The case study illustrates that not only in promoting sustainable management but in all resource management the legislation is only one factor influencing resource management outcomes. An evaluation of continuities and changes in the case studies analysed in this thesis can be used to assess the impact of the

RMA 1991 and the concept of promoting sustainable management on changing resource management practices, and therefore further indicate the relative influence of legislation compared with other factors in shaping resource management practices and outcomes.

7.5 CONTINUITIES AND CHANGES IN RESOURCE MANAGEMENT ISSUES:

Emerging in the case studies is a general understanding that promoting sustainable management involves an 'effects-based' approach to assessing resource management proposals. This 'effects-based' approach is based on established resource management practices but has also introduced some changes in the types of effects which are assessed in resource management proposals and who is responsible for evaluating and managing these effects. An analysis of continuities and changes in the northern access road, Mount Davy and Travis Swamp resource issues illustrated that several factors have contribute to both continuities and changes in the issues over time. An evaluation of these analyses should give some indication of the degree to which promoting sustainable management and the associates 'effects-based' approach to resource management has changed the way in which these issues are managed.

From the case studies four general factors can be identified as contributing to continuities in the resource management issues despite changes in resource management legislation. Firstly, resource management issues are caused by actual or potential conflicts between resource users not by the requirements of resource management legislation and, as Max Barber noted, the resource management issues are the same irrespective of planning philosophy (pers. comm.). Secondly, the RMA 1991 and promoting sustainable management does not change the principles of public planning. Max Barber believes that the legislation is 'catching up with' rather than changing resource management practices (pers. comm.) because public planning is still based upon the Law of Nuisance and the principle of managing the adverse effects of resource use on the public but the RMA 1991 focuses on managing effects directly, whereas th Town and Country Planning Act 1977 managed effects by controlling activities.

Thirdly, how the adverse effects from a proposed resource use are managed has not altered. In the northern arterial case study objectives and techniques for traffic management have remained essentially the same over the last thirty-five years. This continuity occurs because reforms in resource management can only be based on existing practices, knowledge and skills (Ian Dalton: pers. comm.). Vining (1992: pp26-28) noted in his hypothetical resource management case study that resource managers tend to defend original management policies even with changing social values. In the Mount Davy case study it is changes in mining technology and transport which have improved site rehabilitation and encouraged miners to reside in established settlements rather than establishing and later abandoning mining settlements adjacent to new mine sites, not changes in resource management legislation.

Finally, continuity in resource management issues occurs because the public planning process remains the domain of planners. Marshall (1966) and Sewell (1968) noted in the 1960s that planners have a 'technical' monopoly on resource management and that their proposals are considered to be separate from and above public opinion. The case studies undertaken for this thesis in 1994 have demonstrated that this situation still prevails even though the RMA 1991 makes community consultation a mandatory requirement in public planning. Councillors, community interest groups and planners think that it is the responsibility of planners to come up with solutions to resource management issues. Opposition from community interest groups to those solutions is dismissed by some councillors and planners as NIMBY politics thus reinforcing the belief that planners can sacrifice the private interests of a few individuals for the 'good' of the wider community.

Changes in resource management issues studied over time have resulted from three factors which are quite independent of changes in resource management legislation. Firstly, changes in social values which conflict with existing resource uses, for example, the importance of protecting wetlands and enjoying the tranquillity of National Parks to some community interest groups. Secondly, increased resource use which magnifies a small or potential resource use conflict, for example, increased traffic congestion on Christchurch's northern road network and increased use of aircraft in Westland National Park. Thirdly,

changes in the functions of or resources available to developers and/or regulatory authorities. For example TNZ does not have the funds or functions of the NRB to justify building a northern arterial road.

The RMA 1991 and promoting sustainable management has been described as a continuity in resource management because it is based on the principle of managing public effects of resource use. Promoting sustainable management has changed the type of effects which are considered in each resource management proposal and who is responsible for evaluating and measuring them. Under the Town and Country Planning Act 1977 a resource management proposal was assessed by the appropriate regulatory authority in terms of whether it complied with the conditions of the zone in which the resource use or activity was to take place. Under the RMA 1991 (S.32 and S.88) it is the responsibility of the developer to evaluate all effects and to manage any adverse effects of a proposed resource use. Developers were responsible for these tasks in EPEP before resource management law reform, but these procedures were only applied to large-scale, government sponsored projects.

The environmental effects considered in promoting sustainable management are much broader than those considered under EPEP or repealed legislation, including indirect, cumulative and synergistic environmental effects; and effects on visual and rural amenity and other characteristics of an area, and on other resource users. It is these broader effects that planners and resource managers are finding particularly difficult to assess. Consequently, two interpretations of promoting sustainable management are emerging among developers, regulatory authorities and councillors. The 'business as usual' interpretation is that promoting sustainable management is a continuation of existing resource management practices but by managing effects directly rather than through controlling activities. An 'innovative' interpretation of promoting sustainable management is developing whereby not only are the direct, site specific effects of resource uses managed, but the indirect or 'downstream' and cumulative effects of a proposal on the environment and on resource sustainability are also considered. Examples of these more 'innovative' interpretations include TNZ's interpretation that building new roads parallel to an existing road network is not sustainable management.

The problem with more 'innovative' interpretations of promoting sustainable management is uncertainty about the temporal and spatial scales to which environmental effects should be considered; how they should be assessed; the relative importance of the different types of effects; and if, when and how these different effects can be 'traded off' against one another. The definition of sustainable management and other sections in the RMA 1991 do not provide any guidelines by which to answer these questions. As Councillor Linda Constable suggests (pers. comm.), the ambiguity and complexity of the concept of sustainable management is such that it encourages a 'business as usual' approach to resource management because anything else is too difficult to comprehend. Ultimately whether sustainable management is innovative or 'business as usual' is: "up to the courts to decide" (Gow Deputy secretary for the Environment 1991: p.16).

Phillipson (1994) has criticised the Planning Tribunal for not taking opportunities to issue a general interpretation of the definition of sustainable management in its rulings. Whether it is appropriate for the Planning Tribunal to do this is debatable (Tony Hearn: pers. comm.) but indications from rulings to date have suggested a mixture of 'innovative' and 'business as usual' applications of the RMA 1991 to resource issues. For example, in the *Bachelor v Tauranga District Council* case the Planning Tribunal upheld that to locate a petrol station in an industrial zone would have adverse effects on the integrity of the Transitional District Plan under S.105 even though the proposal was argued to have no adverse effects under S.5(2)(c) (Palmer 1993: p.6). Robin Odams, TNZ believes that the Planning Tribunal have taken a more innovative approach to assessing roading issues, emphasising the effects of roading proposals on local communities as being less easily mitigated than the effects of residential landuses on traffic (pers. comm.). In this context TNZ do not believe that the Planning Tribunal would uphold a northern arterial designation under the RMA 1991 (Ibid: pers. comm.).

Tony Hearn (pers. comm.) noted two cases of residents objecting to the noise of preschools which were permitted uses in residential zone under the Town and Country Planning Act 1977 and the Transitional District Plans of the respective authorities. In one case the Planning Tribunal ruled in favour of the

preschool and in the other in favour of the residents. What these rulings suggest is that each case will be ruled on the basis of the evidence and arguments put to the Planning Tribunal rather than establishing general rules about the relationship between the location or types of activities and therefore effects as under the Town and Country Planning Act 1977. The indications from the Planning Tribunal decisions at this stage are that while sustainable management is not a radical reform of resource management it is accepted that resource management decisions should be related to the effects of individual proposals on the surrounding environment.

7.6 CONCLUDING THE EVALUATION:

This chapter has sought to establish some general understanding of the impact of the concept of promoting the sustainable management of natural and physical resources on local government resource management. A comparative evaluation of the three case studies analysed in this thesis has been undertaken to establish three factors. Firstly, how sustainable management specifically and resource management legislation in general influences the local government public planning process. Secondly, how sustainable management as a concept is being understood and implemented in resource management practices. Thirdly, how promoting sustainable management has changed the way in which resource issues are being managed.

The local government planning process has been illustrated to be influenced by several groups in each resource management issue but usually only developers and/or regulatory authorities consider the issues in terms of promoting sustainable management. In this assessment promoting sustainable management is not a *raison d'être* for resource management but is used to justify the resource management proposal in terms of resource management law. Other factors apart from legislation have been demonstrated to determine resource management outcomes, but the ambiguous definition of sustainable management in the RMA 1991 S.5(2) makes it particularly easy to justify a wide variety of resource management proposals as promoting sustainable management.

Whether aware of the concept or not all groups involved in the issues are promoting a form of sustainable management by seeking to have what they consider to be the adverse effects of a proposal redressed. Sustainable management as a concept has been largely promoted in the case studies by avoiding, remedying and mitigating adverse effects of the proposal on the surrounding environment including people and communities (S.5(2)(c)). Differences in interpretations of sustainable management have occurred in managing effects that are less tangible and easy to assess; or which were not considered with respect to individual proposals under previous legislation, for example, visual effects and effects on rural amenity; and indirect and cumulative effects, respectively. In this sense promoting sustainable management has the potential to be an innovative approach to resource management but that innovation is restricted by uncertainty about if, how and to what extent these broader effects must be evaluated and managed. The definition of sustainable management in the RMA 1991 S.5(2) provides no guidelines in these matters. Consequently, a 'business as usual' approach tends to dominate promoting sustainable management in local government resource issues at this early stage of resource management law reform.

An evaluation of continuities and changes in the resource management issues coupled with an analysis of the issue of air access into Westland National Park have further illustrated that changes in resource management legislation are not as immediate or radical in resource management practices because legislation is only one factor which determines resource management outcomes. Changes in resource management issues have been illustrated to result from a variety of factors. Problems in managing more subjective less direct effects of resource uses on other resource users, and controversy in resource management issues has been illustrated by the Westland National Park case study to result not from ambiguity in the definition of sustainable management in the RMA 1991 S.5(2) or to be specific to promoting sustainable management. The RMA 1991 and promoting sustainable management appear to have impacted more on the methods of resource management such as effects based assessment of individual proposals, than on the principles of resource management.

PROMOTING SUSTAINABLE MANAGEMENT - CONCLUSIONS

8.1 RAISING THE QUESTIONS:

Extensive resource management law reform has been undertaken in New Zealand as part of a recent process of state sector restructuring. The resulting RMA 1991 has been both praised for its integrated approach to resource management, and as the world's first attempt to incorporate a concept of sustainability into resource management law; and criticised for its size, and ambiguity in the meaning given to sustainable management and little guidance on how to promote sustainable management in the Act. Whether praised or criticised one common assumption tends to have emerged in the literature, that the RMA 1991 will result in a radical change in the way in which natural and physical resources are managed in New Zealand.

This thesis emerged because as a student of transport geography and public policy I was aware that roading projects in Christchurch were being undertaken in a similar fashion as under the repealed Town and Country Planning Act 1977. Not only was there no radical change happening in traffic management but projects were being justified as promoting sustainable management even though overseas transport research has indicated that constructing and widening roads is not a long-term solution to traffic congestion; and that private motor vehicles are not a sustainable form of transport. The explanations I got from the transport planners involved in this proposal and other resource managers, coupled with themes being discussed in literature on the RMA 1991 raised three questions:

- Firstly, is sustainable management so ambiguous that anything can be argued as promoting it?
- Secondly, how important is the concept and the RMA 1991 in determining the way in which resource issues are managed compared with other factors influencing the local government planning process?
- Thirdly, will sustainable management result in a radical change in resource management practices?

It has been the task of this thesis to explore these questions by evaluating how sustainable management is being promoted in resource issues being managed in the local government planning process. It is the task of this chapter to answer them. A common conclusion which has been reached by people analysing the definition of sustainable management in the RMA 1991 S.5(2) is that a less ambiguous, more 'directive' definition of the concept is needed in order to promote sustainable management in resource management practice. I find it difficult to validate such a conclusion without first establishing: how the current definition of sustainable management is being applied in resource management in practice; and how important the concept and the RMA 1991 is in determining how resource issues are resolved in the public planning process. Having established these relationships the thesis shall conclude by offering an opinion, based on this research, as to whether a less ambiguous, more 'directive' definition of sustainable management in the RMA 1991 is possible or desirable. Suggestions for further study will then be made.

8.2 ANSWERING THE QUESTIONS:

In answer to the first question sustainable management is an ambiguous concept as it is defined in the RMA 1991 S.5(2). In Chapter Two some of the different debates and interpretations of what the concept could mean were discussed. The way sustainable management has been understood and applied to the case studies is also ambiguous. For example in the northern arterial road and Kennedy's Bush subdivision issues, promoting sustainable management was used by different key groups to both support and oppose particular resource management outcomes. Out of these case studies has also emerged some general understanding of what promoting sustainable management involves in local government resource issues. Four factors have contributed to a 'working' understanding of sustainable management by regulatory authorities. These factors are:

- interpretations of S.5(2) by the Ministry for the Environment;
- other sections of the RMA 1991;
- established resource management practices; and
- what is socially acceptable to community interest groups and therefore politically feasible for councillors to support.

For example, while Fisher (Ministry for the Environment 1991: p.50) and Milligan (1992: p.51) are debating whether the meaning of sustainable management in the RMA 1991 S.5(2) depends on the way in which the word 'while' is used, the Minister and Ministry for the Environment have interpreted promoting sustainable management to be establishing ecological parameters or 'bottom lines' which social and economic activity cannot compromise (1991: p.1). This interpretation has been adopted by developers and regulatory authorities in the case studies.

Similarly a general understanding has emerged that developers and regulatory authorities are responsible for promoting sustainable management by avoiding, remedying and mitigating adverse effects of resource uses on surrounding environmental media including people and communities as required in the RMA 1991 S.32 and S. 88. This part of promoting sustainable management is based on existing resource management practices. In reality not all adverse effects of resource uses can be avoided or remedied and so are mitigated by trading off positive and negative effects. There is a general understanding that resource management proposals do not promote sustainable management if they have worse effects than the existing situation, the 'do nothing' scenario, and if they are not cost-effective or socially acceptable. These elements of promoting sustainable management are not stipulated in S.5(2) but are provided for in other sections of the Act, (for example S.32, the First Schedule S.3 and the Fourth Schedule S.1), and are established features of the public planning process. What is an adverse effect is not defined in the RMA 1991 but a hierarchy of adversity is being established based on ecological and aesthetic importance and value to the community.

Promoting sustainable management in resource management issues becomes more ambiguous or 'elastic' and controversial when regulatory authorities and developers have to consider adverse effects and other aspects of promoting sustainable management which were not an explicit part of resource management under previous legislation or which are the result of changing social values. For example, indirect and cumulative effects, effects on rural and visual amenity, and ensuring that resources can provide for the reasonably foreseeable needs of future generations are some of the more ambiguous

aspects of promoting sustainable management noted in the case studies. The case study of noise effects from aircraft in Westland National Park suggests that these problems are not all specific to promoting sustainable management but that some have resulted from changing resource uses which resource managers do not yet have the skills to manage, and changing social values which not all community interest groups share.

Sustainable management is ambiguous because it combines concepts in resource management which have not been combined before. Other resource management concepts such as 'conservation' can also be ambiguous because their legal definitions can be interpreted in different ways. As the concepts are adopted into resource management practices a general understanding emerges of what is meant by or associated with these concepts. This understanding has happened with the concept of 'conservation' in New Zealand and indications from the case studies are that, as a result of the four factors discussed previously, a general understanding or 'working' interpretation of sustainable management will emerge as well.

In answer to the second question, although promoting sustainable management is the legal requirement for managing natural and physical resources in New Zealand, the concept and the RMA 1991 are only one factor determining resource management outcomes in the case studies, and not the *raison d'être* for those outcomes. Resource management proposals have been determined by a combination of: the effects of the existing resource situation or proposal; and the outcomes which are technically and economically feasible and socially acceptable. Promoting sustainable management is considered mostly by developers and regulatory authorities and tends to be used to legitimise a favoured resource management outcome in terms of the law. Councillors who make the decision whether to adopt a resource management proposal often have little understanding of sustainable management and base their support for or opposition to a proposal on advice from council staff, demands from community interest groups, and their personal values.

A combination of situational, structure-culture and external factors were illustrated to determine why the resource issues arose, how they would be

resolved, and if that resolution would be controversial in all case studies. Approaches to promoting sustainable management can be a structure-culture factor which some regulatory authorities use to help determine their approach to resolving resource issues, but is only one factor. Mostly, promoting sustainable management is an external factor - it is recognised as resource management law within the provisions of which resource management proposals must be justified, and therefore adverse environmental effects of those proposals managed. The general understanding of the role of legislation in resolving resource management issues is that:

"sometimes it is helpful and sometimes it is a nuisance" (John Dryden: pers. comm.).

The case studies have indicated that legislation is only one factor shaping resource management outcomes. Sabatier (1986: pp23-25) identifies six factors which shape policy implementation of which 'clear and consistent' objectives is only one factor. Similarly, Hambleton (1983: p.403) identifies five factors of which 'the policy message and how it is interpreted' is only one. Therefore although ambiguity in the definition of sustainable management means that a more diverse range of resource management outcomes can be justified as promoting sustainable management in the local government planning process, the concept alone does not determine resource management outcomes.

Given that a 'working' definition of sustainable management is emerging based partially on established resource management practices and community values, and that the legislation is only one factor influencing how resource issues are managed in the local government planning process, it seems unlikely that the RMA 1991 and promoting sustainable management will result in radical changes in resource management practice. In answer to the third question, the RMA 1991 and sustainable management was noted to have introduced changes in the way in which the effects of resource management proposals are assessed, who is responsible for evaluating and managing those effects, and made community consultation a mandatory requirement for all resource management issues. At the same time the lack of guidance on how to assess the cumulative, indirect and other broader effects in promoting sustainable

management which were not part of Town and Country Planning, means that many resource managers have adopted a 'business as usual' approach to promoting sustainable management. Other factors have also altered the issues over time, for example, changes in resource use, social values and the functions of regulatory authorities. Continuity has also been an important factor in all case studies because the causes of the issues, the principles of planning, and the roles of different groups in the planning process, have not altered.

Consequently, two approaches to promoting sustainable management are emerging among developers, regulatory authorities and councillors. Those who consider sustainable management to be 'business as usual' in resource management but by focussing on effects not on activities; and those who consider promoting sustainable management to be innovative. This innovative approach involves considering not only direct effects of resource use on the environment, but less direct or readily apparent effects on both the environment and the sustainability of the resource being used. The problems with promoting sustainable management are that: firstly, resource management reform can only be based on existing practices; and secondly, that the concept itself is so ambiguous that a 'business as usual' approach can be accommodated. The characteristics of resource management and the public planning process mean that development of an innovative approach to and changes in resource management will be evolutionary not revolutionary.

8.3 EXTENDING THE QUESTIONS:

It has been suggested by some critics of the RMA 1991 that a more 'workable' and less ambiguous definition of sustainable management is needed in the RMA 1991 S.5(2) (Harris 1993: p.51, Kay Booth Parks and recreation Department Lincoln University: pers. comm.). The results from this thesis research will be used to consider whether a less ambiguous definition of sustainable management in the RMA 1991 S.5(2) is desirable and possible.

The indications from the case studies are that as an ambiguous concept sustainable management is both useful and problematic in resource management practice. It is useful when regulatory authorities or developers have a resource management proposal which the ambiguities of sustainable

management make easy to justify, for example, building a northern access road. It is problematic when regulatory authorities have to consider effects which were not assessed for individual resource management proposals under the Town and Country Planning Act 1977 such as the cumulative visual effects of a single subdivision proposal on the Port Hills. A more 'directive' definition of sustainable management would guide regulatory authorities in establishing an 'effects-based' approach to resource management, but in providing these guidelines do we not lose the flexibility to assess the effects of resource use and development in specific geographical and social contexts? For example, if the Port Hills are a resource of particular scenic value to Christchurch then the cumulative effects of a subdivision on visual amenity may be the most important adverse environmental effect of that proposal. But if resource managers want to establish general standards for promoting sustainable management then a more directive definition of sustainable management may be useful. The question which must be asked is how 'effects-based' and therefore how site specific and decentralised do we want promoting sustainable management to be?

Whether a less ambiguous definition of sustainable management in the RMA 1991 S.5(2) is *possible* may be more of an issue than whether it is *desirable*. Chapter Two showed the definition of sustainable management in the RMA 1991 to be a product of the influences of two powerful political lobby groups in New Zealand: conservation and business interests. One of the main criticisms of sustainable management is that it is unclear whether it is a conservation or development oriented concept, and the Parliamentary debates accompanying the three readings of the Resource Management Bill indicate that this ambiguity may have been necessary to get the Bill passed because of the different conservation and development values and interests of MPs. These same values are important in local government resource issues. For example, in the Travis Swamp case study Councillors are divided over a resource management proposal which makes an obvious choice between business and conservation interests in the community. The definition of sustainable management in the RMA 1991 S.5(2) summarises those things of value to New Zealanders in resource management: socio-economic opportunities; provisions to ensure a pleasant and healthy natural environment; and opportunities for future

generations to enjoy a similar quality of life to ourselves. The Ministry for the Environment (1989: p.20) concluded that promoting sustainable management meant **considering** all the economic, social and ecological aspects of a resource proposal and all alternatives. The definition does not indicate which values are or should be more important. This decision Parliament agreed should be made at a decentralised community level.

In criticising the definition of sustainable management in the RMA 1991 S.5(2) one final question needs to be asked. Is it the words of the definition which are confusing or the concepts being combined and the 'effects-based' approach to resource management? If it is the latter than altering the definition of sustainable management may not be very helpful. This thesis research has indicated that a working interpretation of promoting sustainable management is emerging based on a combination of the four aforelisted factors. Although the ambiguities in the definition of sustainable management are influencing the way in which it is being interpreted and applied in local government resource management, the legislation is only one factor determining resource management outcomes. Therefore there is no guarantee that even if it was politically feasible to clarify ambiguities in the definition of sustainable management in the RMA 1991 S.5(2) that this would result in any more clarity or generality in promoting sustainable management in resource management practice.

Eckersley (1991) used a quote from Lewis Carroll's 1872 novel *Through the Looking Glass* to illustrate how the words describing the concept of sustainable development could be used to mean different things in different contexts. This quote accurately describes the importance of the context within which natural and physical resources are being managed in determining the way in which promoting sustainable management is interpreted and applied in resource management practice.

"When I use a word," Humpty Dumpty said, "it means just what I choose it to mean - neither more nor less."

"The question is," said Alice, "whether you can make the words mean so many different things."

"The question is," said Humpty Dumpty, " which is to be master (sic) - that's all" (Lewis Carroll 1872, in Eckersley 1991: p.46).

8.4 SUGGESTIONS FOR FURTHER RESEARCH:

This thesis research aimed to answer three basic questions about promoting sustainable management in local government resource management issues. In undertaking this task a whole host of questions relating to both the RMA 1991 and promoting sustainable management specifically, and local government resource management in general have been raised. The following is not by any means a definitive list, but a few suggestions of topics for further study.

This research looked at promoting sustainable management in different resource issues. An assessment of the ways in which sustainable management is interpreted in different examples of the same resource issue such as subdivision may provide further insight into the 'elasticity' of the concept and the degree of 'working' understanding which is emerging.

One of the problems noted in this research was the recency of the RMA 1991. A similar study needs to be undertaken in five or ten years time to see if and how some of these early issues have been resolved. By then indications of the interpretations of promoting sustainable management of the Ministry for the Environment, regional and territorial authorities, private sector developers and the Planning Tribunal should be clear. A time series study would be ideal to see if these interpretations become more similar or different over time.

An analysis of the efficiency of an 'effects-based' approach to resource management in ensuring environmental protection compared with the much criticised prescriptive approach of the Town and Country Planning Act 1977 is a topic which will need addressing in the future. One very interesting question will be whether there is much difference between the two approaches in resource management outcomes.

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APPENDIX I:

In the First Reading of the Resource Management Bill sustainable management was defined as:

"...managing the use, development and protection of natural and physical resources, in a way or at a rate which enables people and communities to meet their needs now without compromising the ability of future generations to meet their own needs and includes the following considerations:

- a) The efficient use of natural and physical resources,
- b) The maintenance of the life support capacity of the environment,
- c) The use, development or protection of natural and physical resources in a way which provides for the social, economic and cultural needs and opportunities of the present and future inhabitants of a community,
- d) Where the environment is modified by human action, the adverse effects of irreversible change are fully recognised and avoided or mitigated to the extent practicable,
- e) The use, development or protection of renewable natural and physical resources so that their ability to yield long-term benefits is not endangered,
- f) The use and development of non renewable natural and physical resources in a way that sees an orderly transition to adequate substitutes including renewable resources,
- g) The exercises of kaitiakitanga which includes an ethic of stewardship (Harris 1993: p.72).